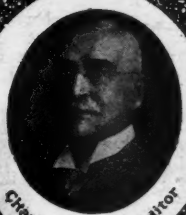


GREEN'S FRUIT GROWER

The Oldest Fruit Journal in America



Charles A. Green, Editor

Rochester, N. Y.

Five Cents the Copy

October, 1915

Plan Now For Early Planting!

Make up your list while your wants are still fresh in your mind. Write for the new William P. Stark Tree Book today. Your name brings it Free.

"It is best, when it can be done, to order trees late in the summer or early in the fall, if one expects to plant an orchard."

L. H. Bailey, Former Dean of College of Agriculture, Cornell University.

RIGHT now after a season's work in your orchard you can tell best what you are likely to need. You can give more time to deciding on varieties. You are not so apt to overlook anything, and you avoid the mid-season rush. Early planted trees make the best growth. Whether you plant in the fall or spring get William P. Stark's helpful Tree Book today, and get your order in early to secure choicest selections.

"The roots of early planted trees throw out their feeders before the buds open. Such trees make a heavier growth. They get a stronger hold upon the soil, and are better able to endure the hot, dry summer."

G. B. Brackett, U. S. Pomologist, U. S. D. A., Washington, D. C.

"Write me about your orchard plans. I have been engaged in fruit-growing and nursery work for over 30 years, and am glad to share the experience I have gained with you. Perhaps I can save you some costly mistakes. Getting started right is most important. Let me help you do it. I want every buyer of William P. Stark trees to succeed with anything they buy from me."

William P. Stark.

J. H. Hale Trade Mark "The Million Dollar Peach"

This astounding peach has startled the country. Experts say it will revolutionize peach-growing. Fruit-growers are amazed at its immense size and quality. Commission men bid double prices for all they can get. The J. H. Hale averages $\frac{1}{3}$ to $\frac{1}{2}$ larger than Elberta; deep, golden yellow, covered with carmine blush; skin fuzzless as an apricot; firm as a cling, yet perfect freestone; a peach so meaty and solid it can be shipped in barrels like apples; a wonderful keeper; amazingly hardy in bud and wood; fruit sold in July on New York market for \$1.00 more per crate than Elberta. It has paid Mr. Hale \$1420 per acre. This season the demand for trees promises to be overwhelming. We are already booking orders from every peach-growing section of the union. Reserve your trees early. Send for the catalog and full description and prices.

Genuine Delicious and Other Good Apples

Apple growers have gotten as much for Delicious *per box* as ordinary varieties sell for *per barrel*. Delicious is the great national dessert apple. Luscious flavor, fragrant aroma, most distinctive appearance, splendid keeper and shipper, adapted to any apple district—the most profitable variety you can grow. We have exceptional 1 and 2 year old Delicious apple trees at William P. Stark's money-saving prices. Also Baldwin, McIntosh, Jonathan, Grimes Golden, Wealthy, Yellow Transparent, Duchess, and other good apples. See full list in catalog.

Stark City-grown One-Year-Old J. H. Hale Peach Trees

We grow our trees, not alone for size, but for strength, shapeliness, clean, stocky growth, and abundant roots. Stark City-grown trees are noted for their heavy, wide-spreading root-systems. We have never had a finer lot than those we will ship this year.

New 160-Page BOOK Now Ready! Write!

Send for this latest and best book today. Fully illustrated with photographs. Tells complete J. H. Hale story. Lists and describes best varieties of apple, peach, pear, plum, cherry, quince, apricot, grape, blackberries, raspberries, currants, gooseberries, strawberries, roses, shade and ornamental trees. Gives ripening season, where each variety thrives best, most profitable sorts to plant, etc. All prices in plain, bold figures. Get ready early this year. Don't wait until you have to order in a rush. Write for this new book today and have your trees reserved now, so they will be shipped at best planting time. Your name will bring the 142-page book by return mail.

TREES DOUBLY GUARANTEED TRUE TO NAME

When you buy of the William P. Stark Nurseries you are protected by a double guarantee—the strongest put out by any nursery. Our trees are hardy—grown by experts, and sold direct to you at growers' prices. No agents, no canvassers—buy from the catalog and save money. Sale arrival guaranteed to any shipping point.

William P. Stark Nurseries

BOX 604 Stark City, Missouri

You can't forget our address—The town is named after our Nurseries.



We have an exclusive contract with Mr. Hale for this wonderful peach; trees propagated from his bearing orchard. These trees always bear trade-marked wooden tag with Mr. Hale's signature. Look for it:



Delicious can be grown commercially wherever apples will grow. It is the greatest money-maker in apples. Always remembered by the consumer for its unusual flavor and unique shape, conical, tapering, with five distinct knobs at blossom end.

FILL OUT AND MAIL COUPON

WILLIAM P. STARK NURSERIES
Box 604, Stark City, Missouri

Please mail me your 160-page Book. I am interested in

- | | |
|---|--|
| <input type="checkbox"/> J. H. Hale Peach | <input type="checkbox"/> Delicious Apple |
| <input type="checkbox"/> Apples | <input type="checkbox"/> Plums |
| <input type="checkbox"/> Peaches | <input type="checkbox"/> Cherries |
| <input type="checkbox"/> Pears | <input type="checkbox"/> Bush Fruits |
| | <input type="checkbox"/> Strawberries |
| | <input type="checkbox"/> Roses |
| | <input type="checkbox"/> Ornamentals |

Approximate Number of Trees Desired.

Name _____

Address _____

The Oldest
Fruit Journal
in America

GREEN'S FRUIT GROWER

Published by
Green's
Fruit Grower
Company

Volume 35

Rochester, N. Y., October, 1915

Number 10

Handling the Apple Crop

Written for Green's Fruit Grower by W. C. SMITH

When one finds a man making a noticeable success of any undertaking whether it be a few hundred acres of hogs, corn and alfalfa or a few acres of hens and fruit or a small patch of truck, it is a safe bet that his methods are in marked contrast to those of his neighbor. If this were not so those occasional successes that stand out so prominently in various communities would fail to attract attention. They are a sort of oasis in what is too often a desert of shiftless or antiquated methods. Nowhere is the contrast between proper and improper methods more noticeable than in the production of special crops and particularly in the management of an orchard.

It is estimated by conservative orchardists that at least fifty per cent. of the success of an orchard is determined by the method of handling the crop at harvest time. As a matter of fact more than fifty per cent. of the total crop, when all orchards are considered, suffers through lack of management at harvesting time. This is accounted for by the fact that the large bulk of the crop that is grown on the general farms of the country, especially the country of the Middle West, is grown by men who are not orchardists. On these farms the orchard is regarded more or less as a traditional fixture. No practical attempt is made to handle the crop on a sound commercial basis and there is usually an enormous waste when the trees produce well. Most of these orchards would yield a nice surplus over home consumption if properly handled both before and after the time of bearing.

Lately, however, orchard maintenance has made an appeal to a greater number of farmers and methods of harvesting have begun to attract attention.

"I regard the proper harvesting of the apple crop as a prime factor in influencing a possible buyer," said a prominent orchardist to me recently. "Our own apples are picked when they are hard ripe. That means before they have begun to mellow but are mature and red. The varieties which do not redden are picked when they will leave the stems readily.

Nature is an excellent guide to harvesting the apple crop and we have found that fruit picked at these times presents a better appearance and keeps better. This is true whether it is marketed direct from the tree or kept in storage for several months."

Visiting his orchard at picking time I found that instead of swinging a grain bag over their shoulders, as many of the neighbors were doing, the pickers for this man were using drop handled baskets and the fruit was being carefully handled. There was no bumping it over the rungs of the ladders on which they were working or against the body of the tree.

"Punctures and bruises," said one of the pickers, "bring apple prices down just as dirty and checked eggs keep our egg prices down. Most of these apples go to a select trade and we mean to treat it well."

And in the up-to-date orchard where the story of success is told in plain figures on the cash book I find every precaution is used to prevent lowering the quality of the fruit. Experienced men know that fruit kept in piles for any considerable time will sweat. They know that bruises will soon be rots. This of course lowers the keeping quality and injures the flavor. At this orchard the fruit was transferred into the packing boxes from the picking baskets and was either sold at once or placed in storage.

I visited another orchard in the same neighborhood where five acres had been set to fruit. This had been set at about the same time as the former orchard but had been poorly cared for. The trees were set too closely and the growth allowed to go untrained and untrimmed

for so long that the fruit simply had no chance to mature. Although the trees were healthy the apples were small and of poor quality. Many had fallen from the trees. It was a sorry sight after a visit to a clean well kept orchard and perhaps even the owner imagines that he does not have as good luck with his tree as his more prosperous neighbor. I did not see the owner and after one look at his work I felt that I did not care to see him.

I asked the gentleman in charge of the former orchard

ducer of first class fruit it goes for naught if the production is not properly marketed. We hear so much regarding the respective merits of barrel and box that the fact that the fruit itself is the thing is largely lost sight of. A neat attractive package certainly has its appeal and apples as well as everything else that goes from the farm to market in packages or containers will sell better if well packed, for the buying public is largely influenced by appearance. No amount of time spent on the package, however will make up for lack of quality in its contents.

Good fruit growers and good farmers who market even on a small scale are willing to get back of their product with their personality. They take pride in it and it is the sort of pride that comes before the cash balance rather than that which goes before a fall.



The boy and the apple. The boy is an attractive subject also the apple. This photograph tells the story of the farm made attractive to the children by an abundance of fresh picked fruit. No child can forget even though he live to old age, the luscious fruit that grew upon his father's farm and which he was allowed to eat to the uttermost.

what he considered to be the most important part of the orchard work. "That is a pretty large question," he replied. "But I believe picking and packing and especially in handling the fruit right at harvest time is one of the greatest causes of success or failure. Of course the orchard must be properly cared for until it reaches the bearing stage and the trees prevented from over bearing. There is a great deal of work connected with a first rate orchard, more than most people think, but it pays to pay especial attention to handling the crop."

After all what he told me was true. No matter how much expense has gone into making the orchard a pro-

English Walnuts in Pennsylvania

Editor of Green's Fruit Grower:—The English walnut is attracting wide interest in Pennsylvania as a commercial orchard tree. Scarcely a week goes by at The Pennsylvania State College without receiving inquiries concerning this nut. These inquiries are usually prompted by the fact that already within the state are bearing trees which have proved both their hardiness and their ability to bear abundant crops of nuts equal or superior to the nuts found in our Eastern markets, which are imported from the old world, California or Oregon, which are the principal sources of our commercial supply.

Because of the interest manifested, the Department of Horticulture of the College has planned a thorough investigation of the subject. This will begin with a survey of the state to determine the location of all trees. In order to make this survey as complete as possible, the Department urgently requests the assistance of every one who can give facts concerning such trees, especially as to location, character of nuts, age of trees and hardiness. Owners of nut trees are urgently requested to correspond with the College. It is hoped that this information will be sent in to the Department without delay so that the trees may be visited by the investigators and fuller notes and observations made.

Whoever is growing such trees is invited to write to F. N. Fagan at State College, Pennsylvania, giving information both as to the trees and to the property upon which they are located.

Maine's Biggest Fruit Farm

George Spaulding of Somerset County has made a record in fruit growing this season not equalled by any other farmer in Maine and probably in New England. He harvested this season 800 bushels of strawberries from six acres and 50 bushels of blueberries and 1,000 bushels of early fruit apples. He has prepared for another season eight acres of strawberries that will fruit at that time. He has been able to find a market for his entire crop of strawberries in Maine. Mr. Spaulding has a farm of ordinary size and has only the ordinary facilities for carrying on the work. He lives 10 miles from any market of 6,000 inhabitants and yet he finds ready help. He has been in the business thirty years. He lives alone and does his own housework but yet accomplishes as a farmer what no other man in Maine has ever accomplished. —John E. Taylor, Me.

The Value of Bees

Written for Green's Fruit Grower by
J. S. UNDERWOOD

In some localities, and especially in the fruit and vegetable growing sections, there are not enough bees to perform the natural, simple duty of carrying pollen or fertilizing the fruit blossoms. This is a matter on which a great many men are uninformed and it will pay well to give it the most careful study and consideration.

There exists in plants or flowers what corresponds to sexes in animals. In some kinds of plants both sexes are found in the same flower; in some they are in different blooms on the same plant, while in others they are on separate plants. In any case fruitfulness depends upon the fertilization of the blossoms by pollen from the stamen being transferred to the pistil of the fruit or seed bearing bloom, which is usually termed the female bloom.

This may occur in different ways, such as the ripened pollen being carried by the wind like dust and falling upon the necessary place, or by being carried by insects crawling over the plants, but bees are absolutely necessary to the production of some crops. In fact, practically all of the fruits and vegetables are dependent upon bees for the fertilization of the blossoms. No matter how fine the plants or how abundant the blossoms or how rich the soil may be, the crop depends upon the thoroughness with which the blossoms are fertilized. This is a fact that every grower of fruits and vegetables should keep well in mind.

Red clover and tomatoes are worked by the bumble bee only, but the honey bee is recognized as the greatest pollen bearing insect we have, and the value of the honey produced each year is not one-one-thousandth of one per cent of the value of the work performed by this wonderful and most valuable of all insects. Perhaps this is not more realized by any class of men as the hot-house cucumber growers, who keep a swarm or two in each house. In case anything happens to weaken a swarm so that the bees stop working the plants stop setting fruit immediately, and the blossoms all shrivel and fall off.

Wet weather is very unfavorable for bees to work, if they work at all. Pollen does not ripen, or distribute well either, except on bright, warm days. This sometimes explains why very little fruit sets in some localities, where there seemed to be a profusion of bloom. Sometimes during a rainy spell there will be a few hours of bright sunshine when the bees will rush out and work desperately, and in their eagerness to gather the abundant honey they will soon fertilize all the flowers nearby. Honey bees do not fly very far away if they can get sufficient honey near their hives. So it is very important that every fruit and vegetable grower should keep a few hives of bees. I have kept bees for many years and certainly would not do without them.

Strawberries are one of the best examples of the sexes of bloom. Some varieties of strawberries are perfect-flowered or bi-sexual, that is, both male and female are found on the same plant. Others are pistillate-flowered or imperfect plants, so far as fruiting is concerned. They have the female or fruit-bearing flowers only, and other varieties from which the bees may carry the pollen must be planted close by or they will not set fruit.

Melons, squash and many other varieties of vegetables have both kinds of blossoms on the same plant, the male blossoms usually being in groups and the female alone. There are many times more male blossoms than female. Peppers, eggplant, beans and peas belong to the class where every bloom on every plant is a fruit-bearing bloom if fertilized, and it is not necessary for bees to carry pollen from plants or flowers, but the pollen must be transferred, no matter whether it is from another or the same one. Well-ripened and dry pollen will get shaken onto the pistil in such blossoms by the wind waving the plants, but not all the blossoms will fertilize by any wind, and the bees are very much needed for this kind of blossoms also. Why honey bees do not work on tomatoes is not known, but bumble bees are very fond of them. The bumble bee does the fertilizing of the red clover, as the honey bee cannot reach down into the red clover blossom.

Aside from getting their invaluable labor free of charge, honey bees can be made to pay handsomely if one takes the time to learn how to handle them. A good deal of patience is required to be a successful keeper of bees, but the work is interesting and profitable.

Cementing Hollow Shade Trees.

Written for Green's Fruit Grower by
J. S. UNDERWOOD, Ozark, Ill.

Treat shade trees as well as we can, hollows will sometimes develop in them. Wounds go unnoticed for a while, starting a hollow which keeps enlarging and before we are aware of it a hole of some size presents itself to view. The old saying "A stitch in time saves nine" applies here. A small hole developing this year will be a large one by the time another year is here; therefore, attention is profitably given to such things while they are small.

The cementing of holes in trees is now quite common. On old estates, where trees have been showing holes in their trunks for years, they are now being cemented, both to add to the stability of the trunks and to arrest further decay. Huge trees with holes in their trunks large enough for a man to stand upright in are now filled with cement, the cement being painted the color of the bark.

To prepare for closing up holes in trees the first thing to do is to scrape away all decayed wood to be found, cleaning out every particle of it, and if it can be done during a dry time so that all the exposed parts of the hole may dry out before the cementing is done, so much the better. Everyone familiar with trees knows that they have an outer thickness of live bark, the inside of it being dead. When applying the cement care should be taken not to let it overlap this live bark. Let it stop at the junction of the dead and the live part, the object being for the live bark to overlap the cement, closing in on it from all sides and completely hiding it from view. This it cannot do so well if the cement overlaps it; besides this cases are known where the live bark had pressed the cement so hard as to crack it. Care must be taken, too, that all crevices are closed with the cement, or water will enter in winter, freezing and soon cracking the cement.

When the work is well done a cemented tree looks all the better for it, further decay is prevented and a new lease of life is started. All this leads to the thought that if trees were looked over at frequent intervals to discover the starting of decay, the further inroads of the trouble could be avoided by applying paint before it was too late. Often it is but a small cut off broken limb that starts a hole bushels are needed to fill. All broken branches should be cut off clean, so as to permit of painting, and especially is this true of large limbs. A scar that will not heal in two years should be painted, or a rot may commence which would do great damage to the tree in the course of time.



This picture does not represent a tornado as you might suspect. The idea of the artist is that good fruit trees are up against the world and are about to obscure or cover the continent.

Where ever fruit trees or other trees are planted they beautify the landscape and tend to make the landscape more attractive. I know of no more promising sight than a young orchard growing thrivally on a hill by the way side.

Sudan Grass

Editor of Green's Fruit Grower:

Within the last few years a new plant, has been introduced into this country from abroad. It came from Sudan in N. E. Africa. The government gave it much attention and found it drouth resisting, and a very valuable addition to the Sorghum family of which it is a member, altho in appearance it resembles Johnson grass. This grass, as it is called, has been introduced into various states and is found satisfactory. It yields, depending on location, from one to eight tons of fine hay obtainable in one to four cuttings a year. It grows under suitable conditions about eight feet tall, and late in the season matures much seed, which has sold at \$2.00 a pound; however, prices are much more reasonable now.

This grass can be sown broadcast by using about 24 pounds of seed per acre, but is generally drilled using about 5 pounds on an average. It is cultivated like the sorghums. It is very prolific and especially after the first cutting it stools out extravagantly. I read recently where one seed produced 560 stems.

Experts have found that in food value it ranks higher than Millet, Johnson grass, or Timothy, and that stock relish and eat it up clean.

It is quite easily mixed so where one desires to save pure seed, much care must be taken to keep it separate from the other sorghums. Being an annual it must be sown each year.

I have grown Sudan grass with such satisfactory results in the past, that it heads my list of forage crops for this year.—J. M. L.

Apples and Eggs

The growers who produce the finest and highest priced apples instruct their pickers to handle the apples just as if they were eggs. Leave the stem on. Removing it from the apple unseals the package and hastens decay.

Orchard Contests

County League Helps Awaken Orchard Interests

Written for Green's Fruit Grower by
ALBERT R. JENKS

The Hampden County Improvement League of Massachusetts co-operating with a local nursery firm, the J. W. Adams Company, conducted several fruit growing contests last year for the purpose of encouraging better orchard methods, the keeping of more data for the sake of the orchard industry and especially for the purpose of securing reliable information on the cost of the different orchard operations. The League has a man on its staff who devotes nearly all his time to fruit growing and is awakening interest in orcharding in a good many ways, but this particular way is perhaps as interesting as any because it has encouraged farmers to find out what their trees were actually making in clear profit, the expenses including the farmer's own labor and horse labor.

The farmers have thought for a long time that their orchards were the most profitable parts of their farms. The results brought out by the balances of the accounts kept of orchard expenses and receipts have been a source of great surprise to most of the orchardists. The data has been of much use to the Horticultural Adviser of the League in his conferences with the farmers of the county and in talks given by him. This data undoubtedly has been the cause of deciding many farmers to take on better orchard methods.

The expenses on a 11-acre orchard which bore from an average to a good crop last year and which is probably one of the best if not the best orchard in the county are as follows: pruning, \$49.83; spraying, \$61.18; fertilizing, \$54.58; cultivation, \$.60; thinning fruit, \$18.80; improvements, \$10.30; harvesting and marketing, \$530.25; preparation of fair exhibits, \$6.18; overhead charges as follows: interest three months on working capital at 5%, \$9.15; interest on valuation of orchard, 11 acres, \$400 at 5%, \$220; taxes on property, \$17.50 per thousand, \$56; 10% depreciation on equipment, \$30; making a total cost of production of \$1046.87. Total receipts from the orchard were \$1557, giving a profit of \$510.13 or an average of \$46.35 per acre. This profit may look small to the average orchardist who is taking good care of his trees, but if he will keep as accurate an account of all expenses including his own labor, horse labor and all overhead charges he will be surprised at the results obtained.

When You Sow Alfalfa Seed

Written for Green's Fruit Grower by
F. H. SWEET

In preparing the land for alfalfa it is best to go slow. The first step is to plow the soil deep and prepare it the first year for potatoes or corn, using about ten tons of manure to the acre, pulverizing or harrowing the land down in good shape. The corn or potato crop should be kept thoroughly clean for a season. This will destroy weeds and the ground will have time to settle properly for alfalfa. Then the following spring the land should be double disked, rolled and harrowed. The seed can then be sown with an ordinary wheat drill as follows:

Mix, and mix thoroughly, about six pounds of cornmeal to ten pounds of alfalfa seed. The ordinary drill when closed to its finest calibration will sow about sixteen pounds to the acre. Thus sixteen pounds of the mixture will mean ten pounds of the alfalfa seed. This is considered about the best amount to sow per acre under field conditions.

Another method of sowing is to cover or plug up all but the first, seventh, etc., holes in the drill with the indicator set at the safe position as before. This will take about one pound per acre and will put the rows forty-two inches apart, far enough to be cultivated.

Storage of Manure

It requires more storage room to store manure than is required if the manure goes direct from the stalls to the field, and it also requires more labor to store it. This alone is a considerable item on most farms and should be considered, even if some of the manure is saved by this method says Penna. Farmer. I have made a practice for a number of years of drawing the manure direct from the stable to the field and applying it to soil intended for corn. I have noticed that the earliest scattered manure invariably brings the best corn and this is an evidence to my mind that the soil is capable of taking care of the plant food in the manure and preventing its escape until the crop can use it. I have several times put manure on the soil and turned it under at once and I find that I do not get very much good from it in the first crop, but when the manure has been on the surface for a considerable time the plant food is much better distributed thru the soil and is in much better condition to be used by the crop.

If the manure is hauled out during the winter a hard job is completed when spring opens up, and the team is ready for plowing rather than hauling manure for a week or two.

Government forms can be compared to our homes in performance; the mother or father giving orders to members of the family to buy this or do that; our parlor representing the senate or parliament, etc.

"My apple on the farm, a Western N. the orchard

Harvesting and Sorting Apples

Written for Green's Fruit Grower by
J. S. UNDERWOOD

The proper stage of maturity at which it is best to harvest apples will be governed somewhat by the distance to the market. If the market is nearby and no shipping is required the fruit may be left on the tree until nearly mellow, but if it is to be shipped a long distance it should be picked as soon as the seeds are fully matured. Winter varieties may be allowed to remain on the tree as late in the fall as will be safe from freezing, but if the fruit of any variety should begin to drop from the tree it should be harvested at once. No specific date for harvesting can be given, because of variation in climate and temperature.

In harvesting apples a good picker will save his wages over a careless one. I have had men pick for me who seemed to think that it did not make any difference how the apples were got off the trees, just so they were gathered. Such pickers are not the kind to have. I like to give men a trial at picking, but when I find one is careless and really doing more harm than good I lose no time in telling him kindly that his services are no longer desired.

Picking apples properly is more of a trade than the uninitiated think. Judgment should be used as to which apple to remove from a branch first. Select the finest first, so this will be secured even if the others fall, and when two are together always pick the best one first. Apples should be picked by breaking off the stem at its junction, rather than pulling it off. A straight pull requires a good deal of power to sever the connection, and is likely to pull the stem out of the apple and knock off several others by the recoil of the branch, while a slight pull with a side or upward twist will usually break the stem from the twig without jarring the branch perceptibly.

In picking an apple, take it in the palm of the hand, rather than between the fingers, and press evenly upon it with the entire hand, rather than with the tips of the fingers, as is usually done. I have had pickers who seemed to think it necessary to leave the prints of their fingers on every apple they picked. After standing a day or two such apples are a spotted looking lot. The bruised apple at picking time means the rotten bushel or barrel of fruit later. With a little care in picking and handling there will be no bruised fruit.

For storage, fruit should be handled but once if possible, that is, picked into the boxes or barrels which are to go into the cellar or storage house. It makes very little difference whether it is stored in bulk, boxes or barrels, provided the conditions are right. Much depends upon the moisture and temperature of the storage room. It should, of course, be dry and cold. I have seen Wealthy apples taken from an ordinary cellar in February which were in fine condition and of excellent quality. The method the grower used was to gather the apples carefully, storing only well-matured, perfect specimens. Each one was wrapped in a small piece of newspaper and packed in a barrel. The paper helps keep the fruit juices from evaporating and if an apple spoils it is not nearly so apt to damage its neighbor as if unwrapped.

I consider baskets to be the best receptacles for the average picker to use. I use the half-bushel kind with drop handles. I had iron hooks made which are attached to the handles of the basket. This enables the picker to hang the basket up in the tree and use both hands. If the apples are laid carefully into the basket and poured from it carefully they are not bruised. The baskets are not so handy as bags in getting up through the limbs, but when bags are used the compression on the fruit is often such as to seriously damage it by bruises.

It is best never to allow a ladder to fall against a tree. Place the bottom about right, then let it gently lean against the tree. The apple ladder is most convenient, as the side rails come together at the top and the single rail can be placed in a crotch where it will stand firm without danger of breaking limbs and slipping and knocking off apples. Any ladder can be made into an apple ladder by nailing two flexible pickets to the side rails at the top and bending them together, securing the upper foot or two with nails and wire. Four or five feet are thus added to its length with little additional weight.

Selling Waste Apples for Good Prices

Written for Green's Fruit Grower by
EARLE WILLIAM GAGE

"My apple evaporator is one of the most paying things on the farm, investment and space taken up, considered," a Western New York farmer told me. And so we went to the orchard where stood a 12x16 rough board building,

in which was a miniature evaporating outfit, which had returned good profits for a number of years.

Western New York apple growers, who do not have many trees, are like other apple growers, for in this great apple section, which stands as one of the most important in the world, a man has not an orchard unless he have from 1,000 to 10,000 trees. But this farmer had 100 productive trees, and he grew tired of middlemen—men apple buyers—as they are known, coming to him and telling that the enormous apple crop had spoiled the hopes of a good price on apples. He, the apple buyer, would therefore be glad to buy his fruit delivered to the side-track for 25c per bushel, graded.

An evaporator is nothing more than a smokehouse, placed in a shed-like structure, being very inexpensive to build. For the ordinary farm orchard, erect a building 12x12 feet to 12x16 feet, ground floor dimensions. Have it 12 feet high from the floor to eaves, and the floor may be earthen or otherwise, as this is not important. Six feet above the floor put in the drying floor. This has 2x6 joists, 12 feet long. It is better to have the joists supported in the middle. On these nail the drying floor, which consists of strips one inch square nailed half an inch apart. Bevel the sides of the strips before laying to prevent the floor from clogging.

In the top of the roof, which should be an ordinary pitch usually given, such as placed on barns and smokehouses, put a ventilator, making it so that it may be closed when not evaporating. A box-like contrivance with sides or slats slanting will serve for the ventilator.

Have the whole house tightly battened by nailing strips over all cracks. The drying-room may be entered by stairs from the outside. On the ground floor have a large stove placed so it may be fired through a small door opening to the outside of the building. Do all the firing from the outside and have the door of the stove arranged so it will not be necessary to enter the ground floor. The

"rings," as the most popular brands are thus cut, and if the fruitman cuts his fruit otherwise, consumers may think that it is not as good and will refuse to buy a second box.

Pack dried apples in attractive 50-pound boxes, with the name of grower on the label. The government prescribes that these shall contain not more than 20 per cent. moisture, for they keep best at this degree.

By evaporating your apples you are sure of a profitable sale when other apples have been consumed or are decayed. Don't take low prices for your fruit. Use forethought and get more money.

Window Garden and Greenhouse in October

Written for Green's Fruit Grower by
F. H. SWEET

Purchase the supply of shrubs desired for winter forcing. When the bulbs potted earlier in the season have become well rooted and begin to send up their tops, they are ready for forcing, and may be brought out of the darkness. Keep in a rather cool, semi-lighted situation for about a week before placing them under the influence of strong light and heat.

House plants summered on the porch must now be taken indoors. Give plenty of ventilation for the first two weeks, so as to accustom them to the change.

Have the frames and pits in readiness to receive the plants, as they are taken in from the grounds. Be careful about their proper drainage.

See that the potting room is well supplied with pots, moss, earth, sand and other necessities, so that all will be in readiness for the winter growing season.

Cleanse every plant with tepid water before taking it indoors, so that insect pests will be diminished.

Pot-bound plants may be repotted at any time. Give them a size larger pot and do not disturb the roots during the operation. Shade them for a few days, until they become somewhat established.

House and Ground Work

Wait until all leaves have fallen before raking them up. Store in bags if possible and use as bedding. Burn the refuse.

Dig ditches, drains and cellar foundations now, before the ground freezes.

In storing away the screen doors, place the screws from each pair of hinges in a separate package and tie them to the door. Number all window screens and also place corresponding numbers in the windows from which they are taken.

Good time to build an ice-house now. The important things are good drainage and a double wall.

In storing away the farm tools for the winter it is the best plan to replace any broken or missing parts now rather than to wait for the spring rush.

Clean out the drains and ditches and see that they are free from obstructions.

October is a good month in which to make concrete walks, steps, drains, posts, cellar and stable floors, watering troughs, etc.

If the paint on the house, barn, out buildings, and fences is wearing off or becoming dingy, there is no better time to paint than in the early fall. A liberal use of paint is a good investment, particularly if you are trying to sell your place. Cheap paint is poor economy.

To keep liquid paint in good condition when not in use, stir it well and fill the pail with water. When the paint is needed, pour off the water and it will be ready for immediate use.

Boats and canoes should be stored upside down so that the water cannot stand in them through the winter in case the roof leaks.

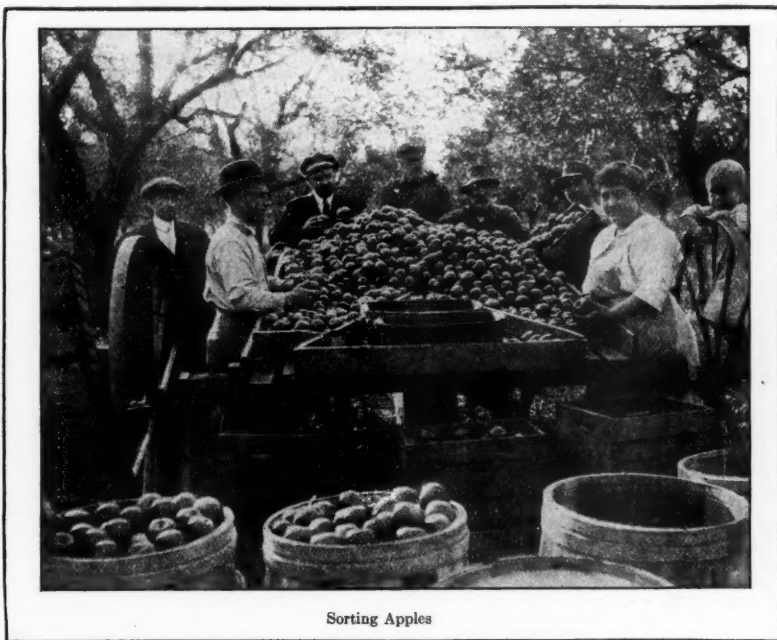
Keep close watch of the fruit and vegetables that are apt to rot. They will require frequent sorting and careful handling.

Look over the jars of canned fruit and vegetables, and remove all that show signs of working.

October is the month to plant spring-flowering bulbs. To have the best display, the soil must be fertile, deep, and of a rather light texture. Unless naturally well drained, place a layer of stones fifteen inches below the surface. Avoid fresh manure altogether and rotted manure directly about the bulbs. If manure must be used, place it in a layer below the bulbs. Should the soil be very retentive, mix sand and leaf-mold with it.

Massing or grouping the various kinds of bulbs give the best bedding effects. Make the beds higher at the center than at the sides, so as to shed the water. The distance apart and depth to plant the bulbs depends upon the kinds selected. The winter mulch is applied in November.

Do not mulch the hardy border plants too early. If the weather remains comparatively warm, wait until next month. In covering, use long material, so the plants will not be suffocated. Leaves are admirable for this purpose, and can be used to a depth of several inches without damage to the dormant plants. Hardy chrysanthemums especially are easily suffocated by a mulch of fine material.



Sorting Apples

Marketing Fruits on Commission

Written for Green's Fruit Grower by
J. S. UNDERWOOD

THE major portion of the general fruit that goes to market is sold by commission merchants. The merchant receives the fruit and when he sells it he charges the consignor usually 10 per cent. of the selling price and remits the balance, less the freight or express charges, drayage, etc. When properly handled this method of marketing gives very good results. We often hear the commission man spoken of by fruit growers as a rascal while the commission man regards the fruit grower or farmer as a most shiftless business individual. There is more or less to be said on both sides, but it may be safely stated that selling fruit by commission is a somewhat loose method of business when regarded from the interest of the consignor.

In the first place, the commission merchant bears no risk, as the fruit is the property of the consignor till sold, and the latter carries all the risk and bears all the losses. Then, too, many commission men have usually little or nothing invested in storage or warehouses for the consignor's fruit. Often the fruit is sold at auction or private sale from wharves or railway platforms, in which the commission man has not a cent's worth of interest, or uses the public streets and pavements before his small shop.

The sender of the fruit has only the commission man's word for the price at which the fruit sold. This is certainly a loose method of doing business and gives great opportunity for fraud, and has often been taken advantage of. Honest commission merchants by their leagues and societies have, however, shut out many of the dishonest men from the business; yet it is easy to see the advantages of commission selling are largely in favor of the consignee, rather than of the consignor.

A great deal of adverse criticism that is cast upon the commission merchants for small returns is often due to the grower's or shipper's carelessness, lack of business ability and lack of knowledge of market conditions. No commission man can get good prices for fruit when the market is absolutely glutted. Nor can any consignor expect good prices under such conditions. There are honest commission men in every market and if one ships to them first-class fruit nicely prepared for market, and the market is not crowded, the returns received will in the great majority of cases be entirely satisfactory.

As a rule, the fruit grower who is located within reasonable distance of a good retail market will make more money by selling his fruit to the retail dealers than by shipping the goods to the commission men in large cities. By careful attention, absolute honesty and judicious advertising he can, in a comparatively short time, establish a reputation for his fruit which will become known to the consumer, who will always demand this particular brand.

Last year I visited the great produce market on South Water Street, Chicago, and noted that hundreds of shippers send their apples, much of it fine fruit of good color and free from rot, to the commission men, dumped into barrels regardless of size or condition, mixed with dirt, leaves and twigs, all tending to lower the value of the fruit of course, a condition which the commission men are quick to take advantage of. All over the great market district in the basements are men and boys constantly engaged in dumping these apples on huge tables where they are sorted according to size and color and repacked in boxes and barrels.

One of the commission men said to me, after I had asked him if it paid him to have the fruit repacked: "I pay expert fruit packers \$3 per day to sort and repack this fruit and their work nets me in profit at least three times their wages, and often four and five times. The way shippers send their stuff to market is a fright, and we people who see it coming in here every day by the hundreds of carloads can understand why fruit growers do not make more money than they do. If I may so relate, too many of them lack common business gump. That's about all there is to it."

In the case above cited, the commission men are simply doing what farmers and fruit growers ought to do themselves, if they would make all the profit there is to be made in the business. Growing the crop is not all of the game by any means. Proper marketing is a good half of it, and perhaps even more.

Picking and Storing

Written for Green's Fruit Grower by
C. H. TROTT, MAINE

Mr. J. T. Skillton, of Penobscot Co., Maine, sells his apples by retail, and his methods of picking are so admirable others might well emulate them. He prefers women pickers, as he seldom hires an average man who will be careful enough. He takes the apple with thumb and the next two fingers, and snaps the stem at the first joint. If it breaks off square and brittle, the apple is ready to come off, but if it has to be pulled the least bit it is still green. He believes in taking them before they are ripe enough to drop, to allow for the mellowing in the cellar before cold weather. Before another night he has all of to-day's picking in a basement of fairly even temperature.

He picks in baskets, with hooks on handles, to hang to the limb. And he has all his younger trees headed low,

for facility of picking. He picks into baskets, and has drayloads of bushel boxes near the trees, the boxes of slats, in which he thinks the fruit keeps better for the free circulation of air. Not a leaf is allowed to drop into the boxes where the winter apples are kept, as he says the decaying leaf rots the fruit. And he charges his pickers not to pull a stem out of the apple, or the fruit will commence to rot there. If inadvertently they do pull an apple off the stem, rather than break it off at the joint, it is thrown away. Again, he charges them never to get that stem longer than the joint, but to unjoint it at the hinge, for on the nub left at the joint is the fruit bud for another year.

No apples are picked when wet. After a rain or Scotch mist they must be allowed to dry before gathering. He markets his goods by train and by auto truck, taking them in the boxes they were first consigned picking them out by the peck for delivery from door to door, unless larger quantities are wanted. Those that will keep till spring are looked over in late winter, and if they show signs of spotting, are picked over. But his care at picking time does away with danger of much such waste, and the extra spring prices more than offset shrinkage.

The Country Dog

Written for Green's Fruit Grower by
JOHN CORNELLY

The history of the human race abounds in examples of perfidy. But in nothing does it exceed the injustice done to man's best friend, the dog. Modern farm literature—as manufactured in a city den, called by courtesy an editorial office, and evolved from editorial brains, which know almost nothing of practical farm life; has of late, felt impelled to malign the country dog. The dog is honest, the editor is not. The editor affects a knowledge which he has not: The dog, conscious of his own honest intention attends strictly to police duty on the farm; well knowing that such dog editorials as emanate, from at least one alleged farm publication, are libels on his character: Knowing also that such dog editorials are at variance with farm ideas and are the hallucinations of a



Opportunity knocks at least once at every man's door. Every man who owns a city lot, a village lot or a farm has the opportunity to enjoy fresh picked fruits at their best and at very slight expense. Do not wait until next year before accepting the opportunity to set out plants, vines and trees about your home, no matter how small it may be.

diseased city brain. The dog is endowed with very many characteristics which are admirable and which coincide closely with human attributes. Joy, sorrow, affection, hatred, jealousy, fear, self-sacrifice, shame, pride, faithfulness, deception, imagination, love of home, consciousness of responsibility, sight, smell, hearing and mental activity. Who will dare assert with any tangible proof that the spirit of a dog will not exist after the earthly body has worn out?

The attributes above enumerated will lead any thinker to the belief that a dog can earn merit by doing his duty and demerit by avoiding it. The inference would be, that, a strict justice requires, the proper recompense from the Creator.

The writer feels assured that country people are disgusted with some of the comments which have appeared of late in at least one very prominent publication: The editor evidently thinks he is in harmony with his readers when he disgusts them.

Occasionally a bad dog will kill a sheep, so will a bad man. Does it logically follow that all dogs or all men shall be exterminated? Every farm must depend for police duty on its faithful dogs. They save farm values by announcing thieves. Several states have of late made the attempts to tax the country dog out of existence; That the sheep industry may be protected. Why should the sheep industry or any other, be protected at every farmer's cost? Let it care for itself, as the poultry and other industries do. The dogs of the writer have destroyed more weasels, yearly, than the State sheep industry is worth. Let the friends of the dog be heard in rural publications from this day forward. Let us also educate Legislatures assemblies.

Original Farm Experience

Written for Green's Fruit Grower by
CALVIN FORBES

I have a good deal of respect for my great grandfathers, yet I am of the impression that even they were not always clear headed.

They used to tell me that one of them when he went to mill would put a bushel of wheat in one end of the bag, and a stone of equal weight in the other end to make the load balance on the horse's back.

I do not know whether this is true or not. Perhaps it was told to injure the character of the old people. Neighbors do such things occasionally.

Mr. Adam and his wife were the first people who raised apples so far as the records show, but whether they trimmed the trees from the ground clean to the top is not known, but we do know that this is the way that many farmers do it now.

An orchard of about twenty-five trees not far from where I am writing is nearly sixty years old, and like a good many people, has gone through life without any pruning. This season, the owner,—a man who came into existence about the same time that the trees did,—rented the place and they arranged to have the trees trimmed. They trimmed them. The tenant commenced at the ground and cut every branch except a whisk at the extreme top, which is less than sixty feet from the ground. Said whisk being a little larger than brush on the end of a Missouri mules' tail.

I had noticed this same sort of thing years before, and when I went back to the farm a few years ago, this question came to me. If I could make the trees bear, how would I get the fruit? Air ships were not in a state of perfection to make picking apples practicable; and if they were I hadn't the money to buy one, so I got the longest ladder I could get, and climbed as high as I could climb and commenced trimming at the top of the trees.

I sawed off the tops of the trees, and when the sap came to the places where the limbs had been cut off it was disappointed, and returned to parts of the tree nearer the ground and threw out many branches. These I trimmed, leaving only the ones that were needed to make a new and beautiful tree—a tree that Mr. Adam and his wife might well be proud to eat the fruit from. In cases where the fruit was not desirable I grafted it to the fruit that I wanted,—Wagners, Spies, Pound Sweets, and such good apples as would not stick in Mr. Adams throat.

A woman hates to be called down by a man, but a man can call an old apple tree down without danger of being molested by a flat-iron or a rolling pin.

There are many chances to exercise originality even on a farm. One of the sons of Mr. Adam it is said was a farmer. I suppose that he raised melons from planting the seeds very early in the spring, and when the seeds rotted, or the cut worms clipped off the little vines Mr. Abel replanted, and replanted until late in the fall he got a small crop.

That's the way the farmers do now, but there is a better way if one will only be more original. It don't cost very much to make a hot bed six feet wide and fifty feet long and cover it with glass. In this can be planted one thousand boxes six inches square, without bottoms, in which 1000 hills of melons can be planted six weeks before it is safe for them to be out in the open. When there is no further danger of frost the little plants will be far in advance of those raised in the old way when they can be put in the field slipping the boxes way off thus keeping them secure from the cut worms. Later the boxes are taken entirely away and stored for another season. By this means a crop can be secured several days earlier than in the old way. It is the early melon that catches the high price. Some of the farmers who read this will say, "that is a good scheme, I believe I will try it next year," but they won't.

There are many ways of putting our thinking powers into practical use; I have seen hundreds of bushels of apples buried under the snows of winter because there was no market for the fruit that would warrant picking and drawing away. I also know a man who saved every apple, and bought more of his neighbors, and by originating a process, and studying the markets, made a business by putting it all into glass. This fruit, in the way of preserves, jellies, apple butter etc., put up in glasses nicely capped and labeled always found a ready market for cash. It was good stuff to eat, and that is what the people want. Any product of the farm that is good to eat,—that the farmer and his family like, will find a ready market if it is put up in an attractive manner and properly put before the public.

Thousands of people are out of work, many are depending upon charity, yet opportunity is ever open to those who would originate and improve.

Surrounding my own farm is a hedge of sassafras. It is spreading every year. It is a menace to the place. Who would think that to dig out these roots and boil the bark down to a syrup that it would be worth hundreds of dollars, as it is one of the best blood purifiers known. Why don't I do it? I haven't the time. I have to fry other fish.

So it goes. I might continue to give instances where originality would open up opportunities that would give thousands of people work and a competency,—provide and supply happy homes. But of what avail?

Our great great grandfathers set the pace, and it is hard to lengthen the stride.

Successful and Unsuccessful Orchardring

Written for Green's Fruit Grower by HARRY E. ELLIOTT

THE orchardists of to-day are radically different from their brothers of a hundred years ago, or even twenty-five, every year sees vast strides with progress as its goal. It is true that every day sees some change in this direction. The tillers of the soil to-day, are not handicapped as were their sires, who did everything by sheer bodily power. To-day, to a large extent, the work formerly done by physical strength is accomplished by improved machinery. As the world has advanced along the lines of invention it has kept step in other ways. The advance of horticulture has been especially marked. Our grandfathers tell us of the apples of their boyhood days, small sour little things, which they considered almost perfect. To show what a revelation has been going on in this particular branch of horticulture, I will mention a few especially good apples, such as, McIntosh, Northern Spy, Baldwin, King and Delicious, apples to please every fancy, to suit every taste. What have we not to expect in the future, as this great industry is yet in its cradle.

With the advance made in the past few years nothing is more neglected by the majority than orcharding. I make the statement from careful observation that 75% of the people do not know how to set and care for fruit trees, especially those grown in our nurseries, which they are taught by the wily-tongued agent will stand anything. The method that seems to appeal to them most is to select some rocky, clayey, good-for-nothing piece of land and set an orchard, expending several dollars for third or fourth class trees. The trees arrive, they take them to the proposed orchard site, dig a small hole with the spade, crowd the tree into it regardless of pruning and leave, picturing the profit they will soon derive from their investment. The farmer then probably has a busy season and feels he cannot hire a man to look after the newly set trees so he leaves them for nature to care for. He does not think of such a thing as going out to see how his orchard is prospering, whether the rabbits and mice are active or not. He thinks it a waste of money and energy to prune, fertilize or spray.

In the end we find a dissatisfied farmer, we cannot call him an orchardist. He cannot say things mean enough about the company he bought his stock of and it is condemned to the end of time. Why? because his trees are small, scaly-looking things covered with bark lice, demolished by caterpillars, harassed by mice. He will tell you New York trees are worthless, that they will not stand our cold winters, that money is thrown away to invest in them. If a portion of his trees survive by pure strength the fruit will be small, wormy and poor, and if saleable at all only at small prices. He may decide then to cut his orchard even with the ground, declaring the trees are not worth the room they occupy. This no doubt is true.

If he hears of some man who is making a success in the apple business it is impossible for him to understand and is generally unbelievably. He will next advocate taking up small, scrubby trees that grow by the roadside and setting them. He has one advantage in this,—he does not have to wait years to grow a scrub he has it to begin with. The illustration I have given cites the case as I have often seen it.

Here in Franklin County, Maine, where I live, is a vast orchard of probably twelve hundred trees, half of them set on a low, boggy piece of land between the hills. These trees were set without the assistance of plow or dynamite, but with the spade. They do not appear to the observer to have made even a casual acquaintance with the pruning knife. There seems to have been no fertilizer to spare. Result—the bark of the trees is black, many are leaning and otherwise deformed, borers and fungi are rampant, spraying is unknown. I venture to say that an experienced orchardist could take one-fourth of these trees, care for them, and produce more fruit and that of better quality than this entire orchard now produces. It is somewhat surprising the number of orchards cultivated in this manner. It would be unbelievable and appalling if we could know the amount of money expended in the state of Maine alone for nursery stock, and then to know how much it is cared for. A great many farmers might just as well burn their money as to set nursery stock and care for it in the ways I have mentioned.

Still another dissatisfied planter is the man who sets unprofitable varieties like Ben Davis, and finds after years of toil and endeavor that they will not sell. Another sad thing is the man who understands orcharding but is baited in by some irresponsible company and who finds he has sown but to reap Pig apples, or other worthless varieties. I am engaged in the Nursery business at present, and have been on the road selling trees for several years. I have arrived at the conclusion that success can only be gained in the orcharding business through cultivation, pruning, fertilizing, and a careful attention to details.

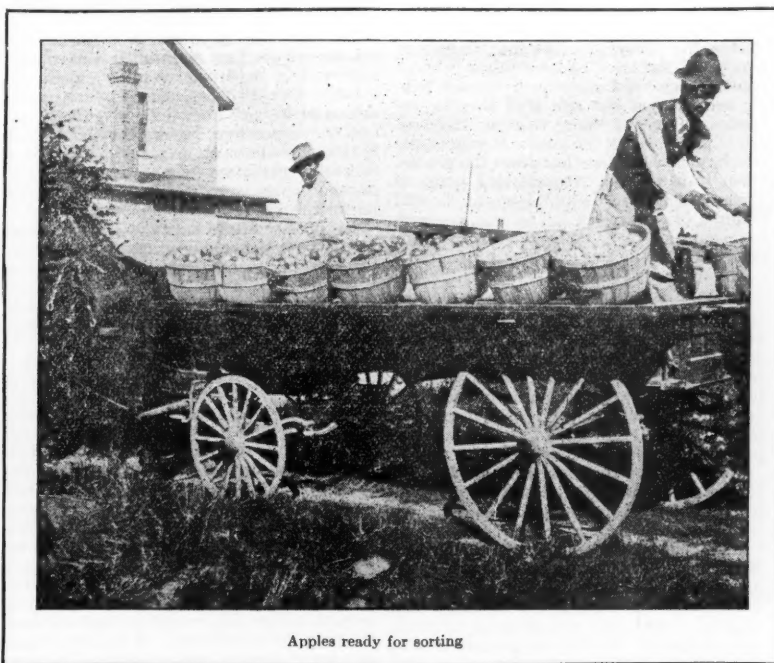
Mr. Orlando Cobb of Somerset County, Maine, a few years ago set some small 3 to 4 ft. trees as an experiment

hoping however to profit thereby. These trees were carefully pruned and cultivated and liberally fertilized. The crops raised among the trees more than paid for cultivation. To-day he has as fine a little orchard as one would care to see. It is a pleasure to look at it. This was done by a man wholly inexperienced in the nursery business, and shows what the average man can do if he has common sense and uses it.

If any man thinks the apple business unprofitable he should talk with the Hon. Sheldon Beal, of Somerset County, who is an enthusiastic grower of blue ribbon fruit. Give your orchard the time and care you give your potatoes and other crops and you will make more money, make it easier and at less expense.

I notice in a recent article in Green's Fruit Grower, that Mr. John E. Taylor approves hogs as general cultivators of an orchard. Where we have an old growth orchard of large trees, this is undoubtedly a handy method, as it thoroughly works the soil about the trees and certainly fertilizes them. But keep your hogs away from your young trees. I saw not long ago an orchard in this class which had received too much attention from hogs. In many cases the roots were laid bare, broken, twisted and partially uprooted. This applied to nearly all of the trees. This orchard is located in a portion of the hog pasture where the owner did not notice the untold damage his hogs were doing until too late. In my opinion ashes is the ideal fertilizer for fruit trees.

In setting an orchard for profit the trees should be set 40 ft. apart. Many growers do not appear to realize that their trees will grow, and crowd them in 15 or 20 ft.



Apples ready for sorting

apart. Trees should be set on ground prepared the year previous and fertilized in the usual way. The trees should be set by the use of dynamite, as it thoroughly loosens the ground and gives the feed roots of the tree a chance to reach out for food. The ground on which young trees are set should be cultivated, after setting the trees, for two or three years regularly, and then once in every two or three years. The trees should be pruned each year. It would be well to consult some standard work on this subject as the novice does more harm generally than good. The varieties one should plant depend on the market, location, etc. I would advise planting such trees as McIntosh Reds, Wolf River, Kings, Baldwin and Johnathan, which are all standard varieties, succeed generally, and are always in demand at good prices. Varieties like Ben Davis should be let severely alone. Their very quality should condemn them. A tree to do its best should be pruned at setting, not only the top but the roots as well. Cut back all bruised or broken roots using a sharp knife, cutting smoothly in a slanting direction.

Profitable Apple Growing in Maine

Written for Green's Fruit Grower by
JOHN E. TAYLOR

That fruit growing is profitable is shown by experiences of E. H. Cook of Kennebec County, Maine, who says: "Mr. Smiley in Vassalboro about sixty years ago set out an orchard, and beginning when it was seventeen years old he received an average of \$500 a year from three acres of orcharding every year for thirty years. In thirty years, from three acres of orchard, without

cultivation, pastured to sheep, he received \$15,000. And he has got the most of it now."

"I am well acquainted with a man who is now alive and in active life, and likes a dollar just as well as he ever did, who set Baldwin trees since he was sixty years old and has harvested eight barrels from a single tree—planted after he was sixty years old and he is still in active life."

"Albert R. Ward of China bought, ten years ago, 100 Ben Davis apple trees and has cared for them since in a rotation of hoed crops and clover—two hoed crops and one of clover. He has mowed it one-third of the time. After getting this crop of clover he would plow it. He has successfully raised that rotation of crops on the piece of land, got just as much out of those crops as he would if there had been no trees there; gave \$20 for his 100 trees ten years ago, and it cost him something to plant them. Those trees have cost him nothing since except they have been in the way a little in tilling the land and raising hoed crops and clover, because he is going to get returns from his hoed crops and clover. Now after the trees had been planted several years he discovered that Ben Davis were not good for anything, and he started in grafting and grafted 25 to Baldwins. Why he stopped I don't know, but that is all he grafted to Baldwins, twenty-five. That left him 75 Ben Davis trees. By the time those 75 Ben Davis trees were ten years old he received more than \$400 in clean cash from the apples; and he has not received one dollar from his Baldwin trees."

"A man by the name of Lord up in Charleston, Penobscot county, had, quite a few years ago, a fine young orchard—pretty extensive for this land of little orchards,—and they had come to bearing and borne a few years and he heard that Ben Davis were no good and he decided to graft them over. But just before he did he thought he would think over how he had got along so far, and he found that the one-fourth of his apples that were Ben Davis had yielded him more than three-fourths that were not, in that orchard, and he let them be and they are all right yet."

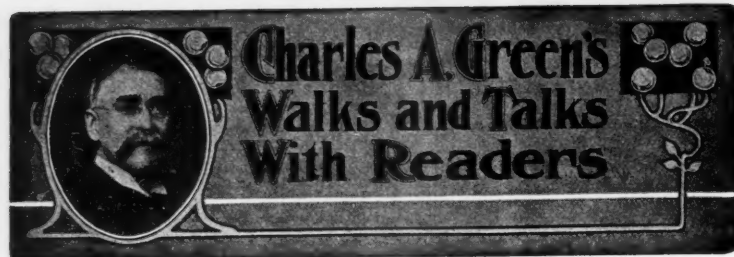
"From six-year-old Wealthy trees a barrel to the tree has been harvested, showing that a man who can comb his hair with a towel may still set out apple trees and get the result before he dies. From six-year-old trees the husbandman harvested a barrel to the tree."

"I have apple trees on my farm that were set in the spring of '97 that have borne two barrels to the tree. A patch of apple trees that I have in mind over in Vassalboro—of about forty trees—has borne four years in succession, has never rested, and borne very heavily."

"Charles Moore of East Vassalboro has a Spy orchard, an orchard of Northern Spy trees of about fifty to sixty trees, that have borne hundreds of barrels in a single year, and borne every year for the last seven years. He is a butcher by trade and has a good deal of fertilizer from his shop, and he puts that on and everything else he gets hold of, and he don't know whether there is any nitrogen in it or what there is; but he knows there are apples at the end of the year. He gets Spies that will weigh those tall trees down clear to the ground, and packed on there as if it were one continuous wall of apples,—year after year in succession, on the same trees and on the same limbs of the trees. And they are mostly Spies, but he has other varieties that do equally well."

"On a four-acre patch of orchard two years ago last spring I began to put phosphate, and last year I got a good crop of apples, and a good crop of apples from the same trees this year,—two years in succession. It was dressed with high grade phosphate at the rate of about a ton to the acre, just put right on and thrown away as most folks would have thought. It wasn't tilled. Pastured to sheep. So that I have come to believe that orchards will bear every year if they are fed enough."

The sodding of bare spots on the lawn or terraces or on the edgings to new lawns may be effectively done at this season, says "Gardener's Chronicle." The ground to be sodded should be first rolled or beaten down firm with the back of a spade, so that there will be no settling after the sods are laid. A convenient size to cut the sods is twelve by eighteen inches. Place the edges close together and fill in all the cracks with dirt. Beat down the blocks of grass with a spade as the work progresses, and if the weather is dry a thorough watering will be of much benefit. When the area is large sod may be used only on the sloping banks and around the edges, while the interior may be planted with grass seed. The latter if sown at this season will make an excellent growth before freezing weather comes, and will come through the winter with a light mulch. Terraces should always be sodded as the rains wash off the soil before the young grass plants have a chance to get firm hold. If the bank is steep, wooden pegs eight or ten inches long ought to be driven in the sods to hold them in place.



Are There 99,000,000 People in This Country Who Never Ate An Apple Of High Quality?

Assuming that the population of this country is 100,000,000, I estimate that 99,000,000 of the American people have never really enjoyed eating an apple. This seems like an absurd statement, but I deem it true owing to the fact that but few people have ever eaten an apple of high quality and therefore, having eaten nothing but ordinary specimens, have never really enjoyed eating an apple.

Most of our citizens, especially of the eastern and middle states, have heard of the Baldwin, Ben Davis and the Greening apples. There are a few more men and women who have heard about the King and Spy apples. These four well-known varieties of apples are about all that the average apple eater knows about, and yet there are over 2,000 varieties of apples cataloged and described as growing in this country.

In conversation with a fruit lover recently I called attention to the vast amount of work necessary to be done by the editor or publisher who desires to inform the public on the value of newer varieties of apples or of rare varieties known only in a few narrow sections of the country. I refer to such varieties as the Faneuse or Snow apple and its seedlings, the McIntosh Red and Shawansee Beauty, to the Banana, the Jonathan, Winesap, Stayman's Winesap, Wagener, Gravenstein, Delicious, Hubbardston, Yellow Transparent, Blenheim, Fanny, Melon and Mother.

I know of no better way to educate the public in regard to the more valuable varieties of eating apples than those generally known than by attempting to induce individuals to plant a tree each of these beautiful high-flavored apples, ripening at various dates from July to April.

Therefore I urge my readers to do as I have done, and that is to plant a specimen row of apple trees, embracing one tree each of a large number of varieties of high-class eating apples. These trees need not occupy much space. At Green's Fruit Farm the specimen trees are about eight feet apart, but if your ground is limited you can plant them three, four, five or six feet apart, and yet by proper pruning and heading back each season, and by leaving wide space on either side of the row for sunshine and ventilation, secure fruit from these trees without serious crowding for ten or twelve years, after which date every other tree can be removed if thought necessary.

What could you have upon your place more interesting than a row of apple trees, which for sake of illustration I will call a hedge row, such as I have described, though it would be in no sense a hedge, each tree bearing such beautiful and luscious specimens of the greatest fruit God ever made. The delight of my life is to visit Green's Fruit Farm each season in October and examine each tree of these specimen rows of rare apples.

Such close planting as I have described and such specimen rows of fruit need not be limited to the apple. If you have room you can plant a row of peach trees, embracing one tree each of a number of the leading varieties, and another row of pear trees, and another of plum or cherry. I take great delight in what I call a hedge row of dwarf pear trees in my garden near my city home, which though not over a hundred feet in length furnishes vastly more fruit than I can consume, but which I find acceptable to my friends as gifts.

Fruit Growers Not Getting Full Value For Their Fruit

Green's Fruit Grower is receiving letters from subscribers who are apple growers, indicating that there are many fruit growers scattered all over this country who, for one reason or another, get very low prices for their apples or other fruit. This indicates what I have often said, that fruit growing, especially on a large scale, de-

mands more business ability than ordinary farming, and yet there is no reason why the farmer or his son should not, by studying the situation carefully, be able to market his fruits at profitable prices, securing a just reward for his labor.

I have said so much on this subject I hardly feel like discussing it fully again. I will say that the apple growers of the country were fooled last season by the apple buyers who, misrepresenting the situation in connection with the war in Europe, prevailed upon the panic stricken apple growers to sell their apples early in the season at a ridiculously low price. After the buyers had obtained possession of a large portion of the apple crop they advanced prices and were able to sell the entire product of the orchards of the country at prices which were a surprise to many people.

The Crotch of a Tree

Does the crotch of a tree, that is the point where the branches spread out, ever increase in height with the increasing growth of the tree? There is much misapprehension on this subject. Many people assume that the crotch of the tree increases in height each year as the tree grows, but this is a mistake. If your apple tree branches out four feet from the ground when it is planted, the starting point of these branches will be no higher at the end of forty or fifty years. The tree increases in height only by shoots extending from the ends of the branches.

The Cost of a Barrel of Apples

We have published the statement of careful experiments as to the cost of producing and packing a barrel of apples in the fruit belt of western New York, which as near as I can remember was about \$1.00 per barrel, including the cost of barrel, as indicating the entire outgo to the man who produces and sells a barrel of apples.

Now we have the experience of Manning Ells of Port Williams, Nova Scotia, who after making careful tests, and after paying 30 cents each for apple barrels, which is rather below the usual charge in western New York, and after charging for all labor at 20 cents per hour, and all horse work at 15 cents per hour, and for fertilizers and seed for cover crops, cost of spray material, cost of barrels, cost of picking and hauling to warehouse, estimates that on one orchard the cost per barrel for producing apples is 82.8 cents. At another orchard the cost of a barrel of apples was 67.6 cents. It must be considered that the price of labor in Nova Scotia is less than in western New York.

Farm Fences

Of perishable things I sometimes suspect that farm fences are among the most perishable. The money invested in fences seems to me to be like money thrown away, for it amounts to nothing in the end. When I buy a farm I do not pay much attention to the fences, for I do not intend to patch them up or bother with them. In most instances, with the exception of the outlying line fences, I do away with all fences after a few years of occupancy.

The fencing of farms in order to divide the tract into fields, and the desire to pasture certain fields in rotation, is the prime object of fences, which cost the farmer an average of at least \$100 a year on a 100-acre farm, if he aims to keep the fences in anything like fair repair.

I favor keeping the cattle or other live stock in a small enclosure where they can have exercise and fresh air, feeding them in this enclosure with grass or fodder fresh cut from the field. I consider it wasteful to have cows and other live stock tramping over broad fields, wasting and soiling the feed, or keeping it so closely gnawed down to the earth that it cannot make half its ordinary growth. I am confident that an acre of grass or other fodder cut and fed to

cattle kept in a small enclosure will go farther than four acres, or possibly six acres, of pasture, and the cattle are made more comfortable in enclosures or cool stables than in the pasture.

Then consider what an abomination fences are to the man who desires to have everything slick and tidy. Fences are so easily tipped over, broken down, or with posts or stakes decayed, or with stone walls tipped over by the heaving of winter frosts and spring thawing. After a few years every fence is something of a ruin and a blight upon the landscape. Consider for a moment the average barnyard fence. What a horrible discord it is, made up of patchwork and proppings of a structure which was at some past date reasonably substantial in appearance but now an absolute wreck and blot upon the landscape.

Loss by Extravagance as Compared With Loss by Fire or Water

If a wealthy man spends \$100,000 for a feast there are many benefited by this extravagance. All or nearly all of the items used in the feast must be purchased and there is but little if any waste. If a building burns that has cost \$100,000, the material is an actual waste. The timber and labor expended in erecting this structure and all the material used has vanished. No one is benefited by the burning of the building.

The same conditions occur in war when ships are sunk, when villages and cities are burned or torn down and when many of the best citizens are killed. Here is actual destruction that benefits no one.

If a fire occurs in your city or village and you escape you may feel that you have met with no loss, but in fact you have met with a loss. The wreckage caused by war may not occur in your immediate neighborhood, but no matter how far distant the battlefield is, the destruction occurring is a loss to every inhabitant of the earth in some degree, though not so great as in the country where the battles are fought.

In the case of the burning of the building, is not labor benefited to a certain extent as the men are employed to erect the new building in its place, I am asked?

Yes, there would be a slight benefit providing the carpenters would otherwise be idle.

Joy In Fishing.

Yesterday as I rode through one of our city parks I saw two little boys at the farther limits of a stream fishing. This reminds me of my boyhood days on the farm when fishing was one of my chief pastimes. As a child I wandered through the orchard and farther on through the meadow to a brook, which later passed by the cobble stone school house. I cast in my baited hook where the foam had accumulated by the crossing of a fence and in an instant a large fish caught on and was soon flopping upon the bank. I cannot express my joy at landing such a seeming monster which was probably fully six inches long. The boys I saw fishing in the park were catching nothing and I doubt if there were any fish there, though the boys were happy in expectancy. How often this is true in our experiences in life, we are apt to expect many things which are never achieved.

Killing Disease Germs

A friend having a case of suspected contagious disease in his house asked the doctor after the patient recovered how he should disinfect his house, assuming that the rooms would have to be fumigated.

"No," replied the doctor. "We do not fumigate now as we used to do. We have discovered that sunshine and fresh air are the best disinfectants for removing disease germs from rooms." Nevertheless, if I were buying a house which had been occupied by different families for a long number of years, I would feel like taking off the paper from the walls and repapering every room and repainting the woodwork and the floors. I believe such treatment of an old house would remove the danger of germs of disease congregated there during the many years of occupancy.

How Old Is Your Oldest Tree?

Before you begin to brag about your aged trees allow me to introduce to you a Sequoia, which when cut down was 1341 years old. This tree is not the largest of its class. There are others in California much larger, so large that a four-horse team and a big stage can drive through a

hole made in their trunks. A big section of the 1341 year old tree was cut off and now may be seen at the American Museum of natural History in New York City. Each year's growth is recorded by the indications of natural growth, therefore there can be no mistake about the age of this tree.

When Napoleon was overrunning Europe with his wars, this tree was nearly as large as at present. This tree began its growth about the time of Mohammed. It is not quite so old as the Christian era and yet it is old enough to be considered an antiquity.

Is There Such a Thing as Good Luck

Many people say that there is no such thing as good luck, that there is a cause behind every event. But you and I know that there is such a thing as good luck and bad luck.

Supposing a man has accumulated a thousand dollars and was ready last April to start in a manufacturing enterprise. His little business was just getting under way when the world wide war suddenly broke loose upsetting the finances of the entire world thereby crushing this little manufacturing concern. Would this not be bad luck which no foresight could prevent? On the other hand, supposing a man started out with a thousand dollars soon after the civil war began and the necessary inflation of currency; supposing this thousand dollar man invested his modest fortune in a productive farm at \$70.00 per acre, having no reason to expect an advance in the price of farm lands. Suddenly paper money was reduced in value and gold was selling at \$1.40 and price of farm lands advanced to \$150.00 per acre and our \$1,000 capitalist doubled on his investment, thus making perhaps \$10,000. Was not this good luck?

I am a billiard player, but some of my friends do not think me skillful enough to be thus classified. One day my opponent after almost every shot leaves the balls where I can hit them easily and without much skill and I win the game. The next day I leave the balls after almost every shot so that my opponent makes easy runs and I am defeated. One day I make numerous shots by simply touching another ball. The next day I miss the shots by nearly a hair's breadth. Surely good luck and bad luck enters into our games or work, whether it be billiards, golf or finance.

A Long Time in Building

"How long were you in building your house?"

"I completed it in two months."

"You succeeded better than I did, for it was six months after I began to build before my house was completed."

But this is trifling compared with the time necessary to complete other notable buildings. A church at Rochester, N. Y., must have been fifteen years in building. In New York city the cathedral named after St. John the Divine has been twelve or fifteen years under construction and is not much more than half completed. In Europe we have examples of cathedrals that required thirty-five years, another, seventy years, and one, one hundred and twenty years, for its completion. I hear of another, the cathedral of St. Sophia at Constantinople which, if I am correctly informed, required five hundred years of work before the builders laid down their tools.

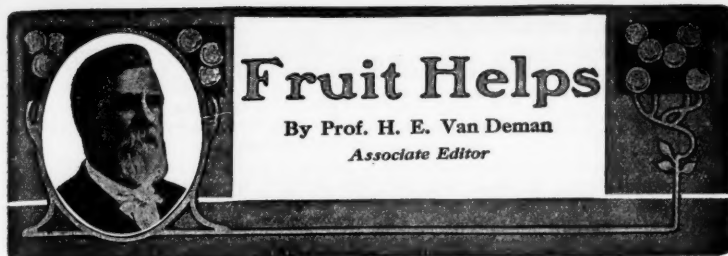
I have heard a great deal about the Cologne cathedral and anticipated great pleasure in seeing this marvelous specimen of architecture, requiring over 600 years in construction, but when I stood before it I was disappointed, as I was the first time I saw Niagara Falls, and the occasion on which I saw the Sequoia trees of California, which did not seem large though our stage and four horses could drive through a hole made in the trunk. The cause of my disappointment in this Cologne cathedral was its beautiful proportions. It is in fact so large that several smaller churches could be placed inside of it without being particularly in the way.

Did the kings, the aristocrats, the nobles build these great cathedrals? No, they were built largely by the savings of the poor. This is one reason why so many years were occupied in completing these structures. There were pauses in order to give time for the laboring men and women to save their pennies and dimes to continue the great work.

The t
To me
ful seas
remember
ing the
grandfat
tion, pla
about w
of to-day
Roxbury
were am
boys of
from now
with pleas
vineyards
Let us m
of autumn
memories
the future
women of
older folks
make the
the apples
at home
beautiful
and plenty
and praise

The T
It is no
particular
any vari
gathered.
a certain k
later than
Every one
gather each
The state of
the conditio
guide. Wh
ripe color
come off.
while on the
faster than
The sooner
sufficiently r
Some var
eral weeks
Grimes Gol
tions, but by
fairly well i
true of othe
where good

There are
apples. Som
practice the
the trees me
This is a mis
I think.
The most
is the most
should never
should have
is pulled out
hole in the ski
decay. By gr
the forefinger
turning the ap
stem will usual
breaking eithe
pulled off the b
pull out a part
come off, and
tance and caus
skin of any app
basket or barn
should never b
to an apple one
Some like a s
for sowing whea
thrown over the
a basket in whic
likely to admit
ping, but it is
warm on the j
with drop hand
quantities are
some fruit farms
There are enou
direct to the p
This gives littl
makes the hand
cheap.



Fruit Helps

By Prof. H. E. Van Deman
Associate Editor

How to Treat Winter Apples.

The time of apple gathering is upon us. To me it has always been the most delightful season of the whole year. How well I remember when a very small boy of climbing the great, old apple trees that my grandfather, an old soldier of the Revolution, planted as seedlings and then grafted about waist high. Some of the best apples of to-day, such as the Yellow Bellflower, Roxbury Russet, Fall Pippin and Genet were among them. I often think of the boys of to-day and wonder if, fifty years from now, they will look back and cherish with pleasure the time spent in the orchards, vineyards and berry patches gathering fruit. Let us make the most of these golden days of autumn; for with them will be stored up memories that shall have much to do with the future of those who are to be men and women of the next generation. While we older folks work and the children help us to make the cider and apple butter and gather the apples for market and for our good cheer at home during the winter, let us drop beautiful thoughts of these times of peace and plenty, and instill feelings of gratitude and praise to the Giver of all our bounties.

The Time for Gathering Apples

It is not possible to safely state any particular date, even at one place, when any variety of winter apples should be gathered. The seasons are so variable that a certain kind of apple may ripen earlier or later than the average of its own date. Every one must be the judge of the time to gather each variety every year for himself. The state of maturity, and, in some degree, the condition of the weather should be the guide. When a variety begins to show a ripe color or falls badly the fruit should come off. In the warm air and sunshine while on the tree the apples will ripen much faster than in some cool, shady place. The sooner they are gathered after they are sufficiently ripe the better they will keep.

Some varieties should be gathered several weeks before others. Jonathan and Grimes Golden are fall apples in some sections, but by early gathering they will keep fairly well into the winter. The same is true of other varieties. Here is one place where good judgment is needed.

How To Gather

There are many ways of gathering winter apples. Some that I know advocate and practice the plan of keeping the soil under the trees mellow and shaking them off. This is a miserable, dirty and careless way, I think.

The most careful picking and handling is the most profitable. A winter apple should never be bruised a particle. It should have a perfect stem; for if the stem is pulled out there will probably be a small hole in the skin which will eventually cause decay. By grasping the apple and placing the forefinger or thumb on the stem and turning the apple upwards or to one side the stem will usually part from the twig without breaking either. No apple should ever be pulled off the branch. If the stem does not pull out a part of the branch will probably come off, and this will be a constant annoyance and cause holes to be punched in the skin of any apples which lie next to it in the basket or barrel. Anything of the kind should never be allowed to remain attached to an apple one minute.

Some like a sack fastened at the ends as for sowing wheat with a hoop in the mouth, thrown over the shoulder, and others prefer a basket in which to gather. The sack is not likely to admit of any accidents from dropping, but it is sometimes uncomfortably warm on the picker. Stout oak baskets with drop handles are the best where large quantities are to be gathered. I know some fruit farms that use thousands of them. There are enough so that wagons take them direct to the packers without emptying. This gives little chance for bruising and makes the handling very convenient and cheap.

A Good Fruit Ladder

Where trees are tall enough to require a ladder there is no need in being without as many good ones as may be necessary. Wherever straight poles are easily obtained they are as good for the rails as one could desire. Chestnut makes very good ones, as it is light when dry and sufficiently strong. Hickory is rather too heavy. Pine will do quite well and so will tamarack or spruce. One pole is all that is needed for each ladder. It would be best to cut them in summer when the bark will peel off, so that they would be smooth and as light as the bare wood only. The top should be shaved to a point, and a band of strap iron fastened about the pole some two feet below it. Now with a rip saw split the pole from the butt to the band. spread the butts of the two halves to a sufficient distance to make the ladder steady, which should be much wider than for ordinary ladders, and fasten them so by nailing a strip across temporarily. Mark the places for the rounds and bore the holes parallel with each other, which can be best done while the rails are spread. Put in good rounds of hickory, oak or some other strong wood. A light pole may be hinged to the top round, by boring a hole through the pole and running the round through it. This will act as a prop when an independent or step-ladder is needed. When not in use it can be tied to the lower round. This kind of a ladder can be used in almost all places where one is needed. It can be thrust into a tree anywhere, and the top leaned against a branch or fork. Some should be short and some long, so as to meet all cases.

Sorting

Close sorting is important as only good grades sell at fair prices. After the apples are gathered and laid in piles under the trees or stored temporarily in some other cool place they should be carefully covered with straw or something else that will keep them in an even temperature. Some sort into different grades when they are taken off the trees but most fruit men delay it until the final barreling for market or storing for winter. The less they are handled the better in any case. If piled in the shade and well covered from rain and sun the earth will keep them cool and there will be less rot than if where they are subject to the fluctuations of the temperature of the outside air. They can be sorted better after the first defective ones have had time to develop rotten specks.

Only two grades should be made for market, unless there is an extra fancy one made up from only a few of the very best specimens. The poorer grades or culls should be fed to stock, made into vinegar or evaporated. Never, no, never sell them to a distillery at any price. We have too much brandy and its terrible effects already.

Barreling

Whatever may be put into barrels for the market should be so honestly put up that whoever opens them will say that there is at least one honest apple packer. If for foreign market press in the head by lever or screw power so tight that the top layer will be almost ruined. Next to dishonest grading in the barrel there is nothing that causes so much loss to the exporter as slack-packing.

Storing

The best temperature for apples is about thirty-five degrees above zero. This cannot be attained nor maintained except in severe spells without artificial means. But a well-planned and constructed storage house will keep apples very well. The warmer it is the greater the necessity for dryness; and the cooler the more moisture is admissible. Indeed, it is better to have an apple room moist if it is cool. One of the best ones in the West has a running spring in it. Apples should not be allowed to shrivel. It spoils them for crispness and delicate flavor. Burying apples out of doors is better than to keep them in a warm cellar. They will rot less and shrivel less.

Open an apple storage house on cool nights and keep tightly closed during the daytime. Beware of storing many apples on the farm for next spring's market. The big dealers are looking after that and the chances are this year that they will be cheap.

Apple By-products

There is perhaps no fruit that has so many and varied uses as the apple, says American Cultivator. In the fresh state it is eaten out of hand, and it may be cooked in a great many ways. It may be evaporated or dried and kept for an indefinite period and then cooked in much the same way as fresh fruit. There are also a number of by-products. The juice is expressed and used, according to its age and stages of fermentation, as sweet cider, hard cider, or vinegar. The whole apple, and even the parings from evaporators, are used for apple butter, jellies, jams, etc., and in recent years the culls and cores from evaporators have been dried and sold for \$4 a ton for export to Europe, to be returned to us, in part, later in the form of high-priced "imported wines."

Value of Trees.

In buying real estate for a home purchasers generally are influenced by the number and arrangement of the trees, remarks the New York Sun. Vacant property can be purchased and a house built in comparatively short order, but it takes years to develop large trees. The fault of too many trees can be quickly remedied by the axe, but time alone can develop trees.

A purchaser of a large New Jersey property traveled quite thoroughly over two or three counties and said that the ideal spot in the whole territory, just the property wanted, was declined because on the whole property there were not more than half a dozen large trees.

Fighting Grubworms.

The common white grubs or grubworms are the larvae of the May beetle, and they often do great injury to crops.

Fall plowing is one of the best methods of preventing an outbreak of white grubs. This plowing should be done late in the fall but before cold weather sets in and the ground becomes chilled and frosty, for then the grubs will have gone down to their winter quarters beyond the reach of the plow. Ordinarily the best time to plow is between October 1 and 15. The department of agriculture emphasizes the importance of deep plowing early this fall, since the grubs have changed to pupae and adult beetles, and these will be destroyed if the pupal cells in which they pass the winter are disturbed.

Prayer of a Horse.

In the Book Review for June 20, you make mention of the imaginary prayer of a horse to its master as an important factor in the action, New York Times says. You then proceed: "But the Russians go much further with the idea of intercession for horses, for their war litany contains this petition: 'And for these also, O Lord, the humble beasts, who with us bear the burden and heat of the day and offer their guiltless lives for the well-being of their countries, we supplicate Thy great tenderness of heart. For Thou hast promised to save both man and beast, and great is Thy loving kindness.'"

\$1,000 Worth of Fun

In an address the other day a man who has had a great deal to do with extension work, agricultural education, boys' clubs, etc., quoted from a letter he had received from a boy who had been raising poultry under this man's instruction. After reporting the details of his work and management the boy closed his letter thus: says Penna Farmer:

"I made a profit of \$21.25; had \$500 worth of experience, and \$1,000 worth of fun." I tell you friends, that boy has the making of a real farmer in him. He has the right angle. May he retain that vigorous, healthful quality to enjoy—to "have fun," in his work as long as he lives. Readers, how much fun did you get out of the years work? What do you reckon it was worth? Now don't go whining about the disappointments and losses. No doubt this boy had them too. They belong to the scheme of life, but did you enjoy the work, the effort as well as the fruits of success? This boy had \$50 worth of fun for every dollar made in profit. How rich some lives would be if they were as good managers as he! The people who can add together nothing but

dollars and food and favors and shelter in making their list of blessings in this Thanksgiving season haven't much to be thankful for. If you have lost the God-given, childhood power to enjoy your life, and work, set about finding it, or life will not be worth the living.

Do Your Hard Work Early

Edison has an excellent maxim for daily work: "Do the hardest thing first." True, it is more difficult to jerk one's self up to top effort the first thing in the morning, but it's tremendously worth while. That is when the energy is freshest; when the mind is alert and the viewpoint likely to be more optimistic, because it is as yet uncolored by the petty annoyances of the day. As a rule, it takes half the time to do a task then than later, when the energies are at a low ebb. But clearing the deck early in the day leaves the other hours free for the less arduous tasks which do not require the very maximum of energy and ability.

What inspiration urges the grub toward its food at the bottom of the clod, what compass guides it? What does it know of those depths, of what lies therein or where? Nothing. What does the root know of the earth's fruitfulness? Again, nothing. Yet both make for the nourishing spot. Theories are put forward, most learned theories, introducing capillary action, osmosis and cellular imbibition, to explain why the caudicle ascends and the radicle descends. Shall physical or chemical forces explain why the animalcule digs into the hard clay? I bow profoundly, without understanding or even trying to understand. The question is far above our inane means.

Fabre studied instinct; he studied life in the very act of living it.

If the soil contains too much salt it will prevent the germination of seeds and will kill any plant life except sea plants. If salt is added in small quantities, it will decrease the size of the stalk and make it grow more firm and thus prevent lodging. Some experiments had the effect of prolonging the harvest season by preventing the early ripening. It has been proven to increase the power of water to dissolve lime and other beneficial ingredients.

Some farmers contend that salt prevents rust on wheat and rot in potatoes, but these statements are not absolutely proven, pro or con. The amounts should be regulated by the position of the land and by the drainage, but on most inland farms, two hundred pounds per acre would be plenty and more would be injurious.—Penn Farmer.

Don't Peel Potatoes

The writer rates the potato very high as a food, but peeling and soaking deprive it of much of its nutritive value. Potato-bread, such as the Germans are now using, is wholesome, but the system needs more of it than of wheat-bread. Of ordinary household waste we are told, in substance:

"There is almost nothing in our raw foodstuffs which can not be used. The pig flourishes and waxes fat on the contents of the waste-pail. Children could flourish no less well on the discarded material. The servant class are often most wasteful, from a mistaken, uneducated, and snobbish view of life. To waste food, the energizer of life, is against the higher nature of man, and the duty to avoid it should be inculcated as a part of the moral teaching in every school of the land.

"The crusade against alcohol has worked wonders, but we want a crusade also against waste, and one prevalent form of waste is overeating. The widely held idea that man can feed up his strength is wholly erroneous. The amount of food required is determined by the energy output of the body, and to put in more is as useless as pouring petrol into the already filled tanks of a car. Many of the children of the rich are nowadays really starved by overindulgence. Three meals a day is the right rule, and every man should rise from table not satiated, but wishing to eat more. The nation needs to eat more wisely, and it may well think of this while considering the ways and means of cheapening food."

Army and navy are needless if nations are under one proper universal control; make men useful by planting crops; do hard work for women who have to be overburdened by bearing men used for no right purpose whatever in war.

Fertilizers for Different Crops

A method of fertilization should fit both the soil and the crop. It is impossible to suggest a formula that we are sure will be the best for all conditions. If a farmer is using a brand giving good results, he should not discard it for another until he has tried the new one, says Prof. Earl Jones, Ohio Agricultural College in Better Farming.

There are a few general principles to be observed in the application of fertilizers. The amount of nitrogen in the formula may be decreased after an application of manure or after a legume is plowed under. Sandy soils and soils lacking organic matter are usually deficient in organic matter. Sandy and muck soils are also likely to be lacking in potash.

The following mixtures are merely suggested for the crops mentioned, and similar mixtures would probably serve as well. The amounts recommended are liberal and depend upon the conditions of the soil. Suggestions are also made as to the source of the nitrogen. Nitrate of soda, tankage, acid-phosphate and muriate of potash are the usual materials recommended for use in home mixtures. These are at present the cheapest sources of plant food and are satisfactory.

Legumes—Minerals and lime are necessary, and nitrogen only to start the crop on poor soil. If a new legume is grown, the soil should be inoculated. For starting the young crop, an application of 300 pounds to 600 pounds of a 3-7.5-7.5 mixture is advised. The nitrogen should be available. If manure is also used, 200 to 400 pounds of a 2-8-10 mixture would probably be preferable. This last mixture may also be used as a top dressing for meadows where encouragement of the growth of clover is desired. Others advocate simply the application of 500 to 600 pounds of acid phosphate or basic slag and 150 to 175 pounds of muriate of potash for clover meadows. This can be applied either in spring or fall.

Grasses—Soluble nitrogen, applied early, in the spring, encourages the growth of grasses, but has a tendency to drive out the clover. Manure is very good for a top dressing, but if not available, 400 to 800 pounds of a 5-6-6 mixture is recommended. This should be applied early in the spring and all the nitrogen should be available. A seeding down mixture should have more phosphoric acid and potash. With manure, 250 to 500 pounds of the 3-7.5-7.5 mixture, given above, is recommended. If manure cannot be used 400 to 800 pounds of a 3-6-9 mixture would be advisable. About one-third of the nitrogen should come from nitrate of soda and the remainder from tankage or other organic sources. A 3-7-4 mixture is also advised for seeding down, when it seems that potash is not especially needed.

Corn—Corn makes most of its growth during the summer, when plant food is being made available. It can make better use of manure than other crop. It is rarely profitable to attempt to grow corn by the application of fertilizers alone, unless the soil is well supplied with organic matter, or has been manured. For land manured or well supplied with organic matter, 250 to 500 pounds of a 3-8-5 mixture is recommended and all the nitrogen may come from nitrate of soda. If the soil is lacking in organic matter, 400 to 800 pounds of 5-8-5 mixture is advised and two thirds of the nitrogen should come from tankage.

For sandy land, the same application of a 5-8-7 mixture is recommended, with about one-half the nitrogen from tankage. A heavier application (800-1,000 pounds) of the same mixture is recommended for sweet corn.

Potatoes—If fresh manure is to be used, it should be applied the fall before, but well rotted manure may be applied in the spring. Lime should not be applied directly before the potato crop. Experiments indicate that sulphate of potash produces a better quality of crop than the muriate. Potatoes which have a greater value per acre than other crops will respond profitably to heavier applications of fertilizers than will other crops.

A 4-8-10 mixture is recommended as a good formula for potatoes. For early varieties about one-half of the nitrogen, should come from nitrate and for late varieties, about one-fourth. A 5-8-7 is a popular mixture, and from 1,500 to 2,000 pounds per acre is applied. One-half to two-thirds at time of planting in rows, and

remainder over rows about the time the plants are coming up, seems to be a very good method of application.

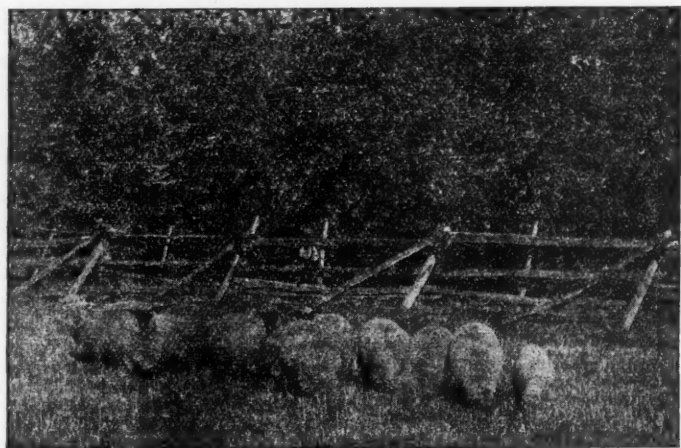
Roots—The 4-8-10 fertilizer may also be used for root crops. A 3-8-7 mixture is also recommended, having from one-third to one-half the nitrogen available at once. Five hundred to one thousand pounds per acre should be used.

It should again be emphasized that it is impossible to recommend a formula that is best for a crop under all conditions. Formulas similar to the above might do as well. The farmer must observe the effect of fertilizers and perhaps experiment some himself.

NEGLECTED VALUES By Madie Giles

I am a native of Virginia, born and reared on a farm. Ever since I was quite a small girl I have taken great interest in studying out new ways of making money at home on the farm. In fact, for several years I have made enough money to clothe myself, and now have a nice little bank account, all from the things on the farm that were not being developed by the men.

There are several things that I make money from, bees, chickens and other things, but what I wish to write about is canning and preserving. For a long time I have been canning and preserving sufficient fruits and vegetables for our own



In old times sheep were one of the main sources of revenue on the American farm, but at the present day there are few farmers who keep these interesting and affectionate creatures. Sheep have done much in keeping up the fertility of the farm.

family use, and gave some for Christmas presents, but about three years ago I conceived the idea of making preserves for sale, says Southern Rurabst. We had lots of damson trees on our place, with the fruit just going to waste. So I bought sugar and made these up into preserves. I had no trouble selling these, so the next year I preserved all the different kinds of fruit that we did not need for family use. I have a nice strawberry patch that I set out and do all the work in, and as I am too far from town to market the berries regularly, I preserve them.

I find ready sale in our nearest town for preserves, such as damson, peach, pear, cherry, blackberry, strawberry and apple marmalade. The kinds that sell the easiest are strawberry and damson. In fact, I have not yet succeeded in supplying the demand for strawberry preserves. I make my blackberry preserves from wild berries gathered in the woods and fields. I put up my preserves in quart and half gallon glass jars, and seal them just like canned goods. Preserves will keep in this way a long time without the syrup turning to sugar.

I also grind up horseradish in a meat chopper, mix with a little vinegar, put into bottles and sell at ten cents a bottle.

There is one thing that I can that I have never seen written about in any recipe or paper, and that is corn and tomatoes canned together. This keeps just as easily as tomatoes canned alone, and is fine for soups, etc. Corn, black eyed peas and tomatoes are also good canned together.

China has an area of a million and a half square miles and a population of more than three hundred million.

American's Aim Is High Living, Says Professor

"The business of every teacher is to make useful men and women. Every man, when he takes inventory, should ask himself three questions: First, Of what use am I to my employer? Every man is a hired man, whether he has one boss like the laborer, or whether he has several thousand like the minister or the college president, or the political boss himself, who is said to be everybody's hired man. Use to your employer determines your wages, paid in money or in something else.

"Second: Of what use am I to myself? "Many who have squandered their opportunities have asked themselves this question somewhat sadly. Many more, especially of that class called by industry, hands, and whose opportunities are cruelly limited, ask themselves the same question somewhat bitterly.

"Third: Of what use am I to society? "And to answer this is the test of the man and the test of his education. We pity the disabled man, and care for him with tender hands in our hospitals and homes; but the able bodied useless man finds his way into the ash barrel, along with the other rubbish. Any really useful man is useful in all these ways. He will be useful to the man, for the cause in whose interest he works; he will be useful to himself and he will be useful to society.

"Let me say to you, every true teacher is a savior. If he is not, he is, in so far, a failure. The great teacher showed man

Skunks

Skunks are fond of the Colorado potato beetle. A writer says of them: "They consider the beetle a delicate morsel and spend many a busy evening in potato patches catching and eating the larvae and the mature beetles."

Although other mammals, including coyotes, badgers, foxes, minks and weasels, do far more good by destroying noxious rodents than is generally realized, the skunk surpasses them all. It is sufficiently numerous in many localities to keep field mice in check, and reports from all parts of the country show that close trapping of skunks and other fur animals is often followed by a great increase in depredations by mice.

The chief indictment against the skunk is that it destroys poultry, and a few cases of losses due to the animal are reported. In many instances of alleged depredations by skunks, it is quite probable that minks or weasels were the actual culprits, and that skunks merely shared in the plunder by eating the dead poultry. When a farmer loses fowls and does not see the animal killing them he is often likely to mistake its identity. The common skunk cannot climb to a roost, and would kill only birds found on the ground. Minks and weasels are expert climbers and are far more blood-thirsty. It is characteristic of the weasel to kill many victims where they are within reach. It makes a small but deep incision in the neck or under the wing of a fowl and takes the blood as long as it flows freely. It then attacks another and another victim, until satisfied.

A skunk, on the contrary, usually takes only one fowl at a time and eats of it until satisfied. Having once, however, acquired a taste for chicken, a skunk may return to the poultry yard night after night for a fresh victim. A skunk making its home under sheds and other buildings roams about them at night in search of food, chiefly rats, mice and insects. That it should occasionally learn to take chickens and eggs is not surprising, but this happens far less frequently than is thought to be the case. It is a habit learned by a few individuals and in no way a characteristic of the skunk family. Of course, the individual skunk that learns to kill and eat chickens should be destroyed.

IT SLUGS HARD

Coffee a Sure and Powerful Bruiser

"Let your coffee slave be denied his cup at its appointed time! Headache—sick stomach—fatigue. I know it all in myself, and have seen it in others. Strange that thinking, reasoning beings will persist in its use," says a Topeka man.

He says further that he did not begin drinking coffee until he was twenty years old, and that slowly it began to poison him, and affect his hearing through his nervous system.

"Finally, I quit coffee and the conditions slowly disappeared, but one cold morning the smell of my wife's coffee was too much for me and I took a cup. Soon I was drinking my regular allowance, tearing down brain and nerves by the daily dose of the nefarious beverage.

"Later, I found my breath coming hard, had frequent fits of nausea, and then I was taken down with bilious fever.

"Common sense came to me and I quit coffee for good and went back to Postum. I at once began to gain and have had no returns of my bilious symptoms, headache, dizziness, or vertigo.

"I now have health, bright thoughts, and added weight, where before there was invalidism and the blues.

"My brother quit coffee because of its effect on his health and now uses Postum. He could not stand the nervous strain while using coffee, but keeps well on Postum." Name given by Postum Co., Battle Creek, Mich.

Postum comes in two forms: **Postum Cereal**—the original form—must be well boiled. 15c and 25c packages.

Instant Postum—a soluble powder—dissolves quickly in a cup of hot water, and, with cream and sugar, makes a delicious beverage instantly. 30c and 50c tins.

Both kinds are equally delicious and cost about the same per cup.

"There's a Reason" for Postum.

—sold by Grocers.

I have fruit cells the season in ordinary storage the midwinter

This is russety p pearance flesh tender of Bose ar nursery, the genuine B price but t pear I kno On account should be wrapped i boxes.

This is roundish in pearance No one w beauty on Sheldon p would diminish is of the h vigorous gro hardly as year at Gre who has a need not env for no vari quality so is a coreless

This is an sweet as the not quite so Bose and S grower and m

In my dw my garden I trees that be fruit is of good owing some ground cultiva stable manure the trees. S good seller at Where the t Seckel pears market.

This is one the dwarf p garden I have which were l year so that down to the sally fair, sm present an a tree, being a carmine chee

GREEN'S FRUIT GROWER

The Oldest Fruit Journal in America

GREEN'S FRUIT GROWER CO., Publishers
C. A. GREEN, Pres. and Treas. R. E. BURLING, Vice-Pres. and Mgr. M. H. GREEN, Sec'y.

Charles A. Green, Editor
Office, Rochester, N. Y.

Our Corps of Special Writers:

Geo. T. Powell, (N. Y.)
Earle W. Gage, (N. Y.)
John Edwin Taylor, (Me.)
J. S. Underwood, (Ill.)
M. Robert Conover, (N. J.)
Uncle Dudley, (Vt.)

F. H. Sweet, (Va.)
W. J. Green, (Ohio)
Frank I. Hanson, (Mass.)
Myron T. Bly, (N. Y.)
John Malcolm, (N. J.)
Joe Cone, (Mass.)

50 cents per year, 3 years for \$1.00

Rates for advertising space given on application.

NOTICE TO SUBSCRIBERS:—If any subscriber has been defrauded by any advertisement appearing in Green's Fruit Grower, he will do us and the public at large a service by at once reporting this advertiser to us, giving full particulars, we will upon receipt of full particulars, investigate and will do everything in our power to bring about a satisfactory adjustment.

Subscribers who change their residence will please notify this office, giving old and new addresses.

Entered at Rochester (N. Y.) Post Office as second class mail matter.

Five Varieties of Pears

By C. A. GREEN

I have had on Oct. eighth ripening in my fruit cellar five notable pears, indicating the season of their remaining when kept in ordinary storage. By placing in cold storage these varieties could be kept until midwinter or much later.

Bosc Pear

This is a large, long-necked, yellowish, russet pear, beautiful in shape and appearance and of very high quality, the flesh tender, juicy and well flavored. Trees of Bosc are slow and crooked growers in the nursery, therefore it is with difficulty that genuine Bosc trees can be secured at any price but the trees are as productive as any pear I know of, yielding fruit in abundance. On account of its high quality this pear should be sold as a fancy fruit, each one wrapped in tissue paper and packed in boxes.

Sheldon Pear

This is a greenish, russet variety, roundish in shape, entirely different in appearance from the long-necked Bosc. No one would select the Sheldon for its beauty on the fruit stand, but after eating Sheldon pear his taste for ordinary pears would diminish, for the Sheldon to my mind is of the highest quality. The tree is a vigorous grower and a good producer, yet hardly as productive as the Bosc this year at Green's Fruit Farm. Any person who has a few trees of the Sheldon pear need not envy any pear grower in the world, for no variety can excel the Sheldon in quality so far as my judgment goes. It is a coreless pear, with scarcely any seed.

Flemish Beauty

This is an old-fashioned pear, almost as sweet as the Seckel, of good quality but not quite so good in quality as Seckel, Bosc and Sheldon. The tree is a good grower and remarkably productive.

Seckel

In my dwarf pear hedge running across my garden I have two dwarf Seckel pear trees that bear profusely every year. The fruit is of good size and free from blemish, owing somewhat to the fact that I keep the ground cultivated and have drawn straw stable manure and used it as a mulch about the trees. Seckel is a good keeper and a good seller at good prices if well grown. Where the trees are not kept cultivated Seckel pears are apt to be too small for market.

Worden Seckel

This is one of the newer varieties. In the dwarf pear hedge row through my garden I have two trees of this variety which were heavily laden with fruit this year so that the branches almost bent down to the ground. The fruit is universally fair, smooth and perfect. The pears present an attractive appearance on the tree, being a golden yellow with a bright carmine cheek long before the fruit is

ripe enough to pick or eat. It keeps well, ripening slowly in the cold cellar. I take out a basket at a time and place in a warm room where they ripen within twenty-four hours, whereas in the cold cellar room they would ripen but slowly. This is the way I treat most of my varieties of pears. If they are ripening too slowly I remove a few of them to a warm room to hasten their ripening. Worden Seckel is a sweet pear. If one shut his eyes when eating a Worden Seckel he might think he was eating a Seckel pear. It is much larger than Seckel and entirely different in color from the Seckel though resembling that variety somewhat in shape.

Fruit Storage Houses

Few of the smaller growers have storage houses of their own and they must ship the fruit to the near-by city to be cared for. It is well to watch the apples carefully after they have been placed in the houses, says Penna Farmer. This may be left to the owner or caretaker of the building, if confidence can be placed in the party. In spite of this however, I think the owner of the fruit should take a look at his property occasionally. In building a storage house it should be taken into account that apples have to be taken out and shipped, sometimes in very severe weather. It is therefore important that the house be close to the railroad where this may be done in safety. In communities where apple growing is an important industry, the orchardists should build co-operative storage houses. These may well be at shipping centers. Such a building will pay for itself in a few good apple years. I know of one case where a co-operative storage house was built by a company, formed by half a dozen farmers. They took care of not only their own fruit but that of other growers at a uniform price. One of the owners informed me recently that the investment netted them an income approximating 20 per cent.

It is a good practice to pull all grass, leaves, weeds, etc., away from the bodies of trees, before snow falls, thus removing at a distance material out of which field mice make their nests. If they nest in close proximity to the tree trunks, they are more liable to injure them by eating the bark. Use a hoe or garden rake. Remove everything clean to the soil. Mice cause the death of more trees than any other agent except borers and scale. C. A. Green's Note:—How much easier to throw a few shovels of soil over the dead grass, or if danger is great bank up around each tree with earth.

Young men, set your goal so high that it would make you blush to tell your friends about it.—The Courier.

David J. Palmer

Commander-in-chief
Grand Army of the Republic

"Under the gentle, cheerful influence of a mild, pleasant tobacco like Tuxedo, a man can work better and rest better. I like Tuxedo very much."

David J. Palmer



The Nation-wide Smoke—Tuxedo

North, South, East and West have united on Tuxedo as the great American smoke, and all over this broad land the fragrance of Tuxedo is ascending from millions of peace-promoting pipes.

Tuxedo cheers you at your work and soothes you when you're resting. It's healthful and wholesome, and it fills your soul with a glad some glimmer like the sunbeams on a rippling brook.

Tuxedo

The Perfect Tobacco for Pipe and Cigarette

There are lots of tobaccos that have tried hard to get into Tuxedo's class—but when you compare them, they only make the goodness of Tuxedo more conspicuous. Trouble is they cannot be made by the "Tuxedo Process."

The famous original "Tuxedo Process" was invented by a physician years ago, and it remains today the one really successful process for taking the bite out of tobacco. It has made Tuxedo the best and friendliest smoke in the world.

Try Tuxedo for a week.

YOU CAN BUY TUXEDO EVERYWHERE

Convenient glassine wrapped, moisture-proof pouch. . . 5c

Famous green tin, with gold lettering, curved to fit pocket 10c

In Tin Humidors, 40c and 80c In Glass Humidors, 50c and 90c

THE AMERICAN TOBACCO COMPANY

Like They Put On Top

—Handsome, firm apples with that freshness of color and smooth skin that fairly make you buy them. That's the kind we sell for a \$1,000 a car and the kind you can grow on, trees you buy from us. Our

Faultless Fruit

is the result of budding from bearing trees known for their splendid yields. That's why our trees are found in practically every fruit section east of the Mississippi and they're hardy, too—the severest of Northern winters leave them unharmed. They have enormous root systems and clean, well ripened wood. Let us help you select the right varieties for your soil, climate and markets—our twenty-five years' experience is yours for the asking.

Harrison's Nurseries
J. G. HARRISON & SONS PROPRIETORS

Box 16

Berlin, Md.



We have over 2500 acres in nurseries here—millions of Apples, Peaches, Pears, Cherries, Ornamentals, etc. Come to Berlin and pick out your stock. We pay your hotel expenses while here and you'll find your trip paid you. We sell only the trees we grow—you're protected. Learn more about them. Send for our Free Fall Catalog. Reserve orders early, we ship when you want. Write now.

Farmer Clapole—Has that city feller who bought Stone's farm learned anything yet? Farmer Sands—Wall, he's learnt it don't do no good ter try ter make apple butter in a churn.—Judge.

DRY YOUR FRUIT
and Vegetables by Steam in two hours on the "Granger" Fruit and Vegetable Evaporator. Cheaper than canning—Less work—No loss—Cost, \$3.00, \$5.00, \$8.00. Send for catalog D.
EASTERN MFG. CO., 299 S. 4th STREET, PHILA. PA.

Clean Up!

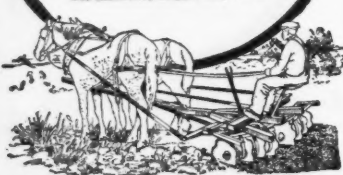
Turn bush-land into cornfield, disk your roadsides and kill the chinchbugs. The

Cutaway

Bush and Bog Plow

does away with the bushknife, grubhoe and shovel—it's better, quicker and cheaper. The forged sharp Cutaway disks penetrate deep, cutting roots, turf and trash and pulverizing the soil. Splendid for deep tillage, 2 horse and 4 horse. Reversible. If your dealer has not the genuine Cutaway write to us direct. Be sure to write us for our new book, "The Soil and Its Tillage." Get your copy now.

THE CUTAWAY HARROW COMPANY
Maker of the original
CLARK disk harrows and plows
865 Main St., Higganum, Conn.



Lowest Prices Ever Made On World's Best Roofing

Lightning-Proof, Fire-Proof and Rust-Proof
Edwards Tightcoote Roofing can be bent, twisted or struck with lightning, and galvanizing will not crack or flake. Bend it or hammer it, you can't loosen or scale galvanizing. This means an everlasting galvanized roof.

"REO" Metal Shingles

Edges, as well as sides, rust-proof. One man can lay—hammer and nails only tools. Interlock—can't come off—nail holes covered by upper layer. Forever wind and weather proof—last as long as building.

No Other Roofing Can Stand Our Tightcoote Test

We give iron-clad money-back guarantee that the Edwards Tightcoote Galvanized and Edwards Eltin Tightcoote Process roofings are longest lived, safest and best on earth. Cost less to use than wood shingles or any other roof. Most artistic. Sheets 5 to 12 ft. long; covering width 24 in. Eltin roofing and siding in all Edwards' styles painted or unpainted.

GARAGE \$69.50

Lowest price ever made on Ready-Made, Fire-Proof Steel Garages. Set up any place. A postal will bring you our illustrated 64-page book.

Freight Prepaid Lowest Factory Prices. Greatest roofing proposition ever made. We sell direct to you and save you all in-between dealers' profits. We cannot quote prices here but if you will send for our **FREE Roofing Book** you will prove to yourself that our prices are lowest ever made for World's Best Roofing. Postal card brings Free Samples, Prices and Roofing Book No. 1054.

THE EDWARDS MFG. CO.
1004 - 1054 Pike St., Cincinnati, O.
We Are Largest Manufacturers of Sheet Metal Products in the World

FREE
Samples &
Roofing Book

ABSORBINE

TRADE MARK REG. U.S. PAT. OFF.

Reduces Bursal Enlargements, Thickened, Swollen Tissues, Cysts, Filled Tendons, Soreness from Bruises or Strains; stops Spavin Lameness, allays pain. Does not blister, remove the hair or lay up the horse. \$2.00 a bottle at druggists or delivered. Book 1 M free.

ABSORBINE, JR., for mankind—an antiseptic liniment for bruises, cuts, wounds, strains, painful, swollen veins or glands. It heals and soothes. \$1.00 a bottle at druggists or postpaid. Will tell you more if you write. Made in the U. S. A. by W. F. YOUNG, P.D.F., 11 Temple St., Springfield, Mass.

Tygart Fertilizers

Are good fertilizers
WE WANT AGENTS
J. E. TYGERT CO.
28B S. Del. Av. Philadelphia

Notes from Green's Fruit Farm

Propping the Trees.—Notwithstanding the fact that the apple orchards in New York state as a whole show a light crop of fruit, especially the Baldwin which is the main crop variety, our trees are loaded to the breaking down point. If you could take a peep into our main orchards you would see Baldwin, Blenheim, Greening, Melon and a hundred other trees with from one to twenty props to the tree. Here and there you would discover large limbs broken down, although we have a man on the lookout for such that need props. The fruit is exceptionally large and free from blemish this year.

Borers in Peach.—Today, Sept. 13th, several men are examining the bearing peach trees for borers. One takes a spade and removes the soil directly at the base of the tree. Another goes along looking for holes where gum is oozing out. Then with a wire he probes the hole, sometimes finding small borer maggots, sometimes large ones, but in any case making quite a stir in the affected part and often killing the borer, although not seeing it. After a few days the trees will be examined again to see if there are any signs of borers still alive. When convinced that there are no borers left we shall paint some of the affected parts with a preparation we propose to test as to its value as a healer and a prevention of future attack, and in any event put back good soil in the holes made around the trees, pressing it well around the tree.

The Fall Flower.—The altheas in many colors both a tree and shrub shape, the hydrangea P. G. the gladiolus never were so noticeably good as they are this season. The value of the althea (Rose of Sharon) as a beautiful fall flowering shrub is not realized as much as it should be or we would see more of them planted. If we can afford it we owe it to ourselves, our immediate family and the community to brighten up our home grounds, be they large or small, and in the fall there is more likely to be a dearth of blossoms than at any other of the three flowering seasons, if we are not careful. For fall flowering plant altheas, hydrangea P. G., gladioli, dahlias, golden glow, baby rambler roses and clematis paniculata.

Sowing Lime.—Today, Sept. 13th, we are sowing 1000 to 1500 lbs. of ground limestone on our eight acre lot where we intend to sow rye in a week or so. The field produced a good crop of rye this season, but the hoped for stand of clover (a big seeding was sown in April) did not show, and it was discovered that the soil is sour and to insure a catch of clover it should be sweetened hence the lime dressing.

Buckwheat.—Thirty-four acres plowed under this summer and such a crop! It stood four feet and was thick on the ground. Had to use a heavy roller and a disc harrow ahead of the plows, also a man to clear the coulters to get it where we wanted it.

To the State Fair.—For exhibition, not competition, just to show our friends a few of the fruits, etc., which we are growing—apples one hundred varieties and pears twenty varieties, plums and peaches in variety, and a plate of the Diploma currant are being sent to the State Fair at Syracuse this week.

A Peach Famine.—While peaches were so plentiful in the big markets and were given away in some of the larger orchards in the leading peach growing sections, hundreds of families a comparatively short distance away were asking, "Where can I get some peaches?" Some of these made arrangements to send to the nearest markets or orchards and procured some; others went without. I know of one or two localities where there was a famine in peaches.—E. H. Burson.

The Pear Crop

This is a season of scarcity in pears in the eastern states, thus pear prices are running high. At Green's Fruit Farm we have a moderate crop of pears, consisting mainly of Clapp's Favorite, Bartlett and Kieffer. We have sold our Bartlett pears to a dealer near home for two cents per pound, or \$1.20 for a bushel of 60 pounds. Plums are a fairly good crop. Grapes promise a good crop, though I hear of injury to the grape crop at the Hammondsport vineyard.

Peculiar Soils for Different kinds of Fruit Trees

In reply to your inquiry as to what kind of soil is best adapted to certain varieties or classes of fruit trees, plants, and vines I will say that certain soils are more desirable for pears and apples than for peaches and plums and that grapes and other small fruits will succeed better on some soils than on others, but generally speaking any soil that will produce good crops, of corn and wheat or of potatoes or other vegetables will produce good crops of the various tree and bush fruits, if located in a fruit growing section.

A correspondent writes Green's Fruit Grower, that in his opinion it would be folly to plant Northern Spy apples on rich soil. I cannot agree with this statement for I have seen the largest, most beautiful and perfect yield of Spy apples growing on the richest soil in western New York. I refer particularly not only to Northern Spy apples grown on Green's fruit farm, but to those grown on the old Joseph Harris farm. His Northern Spy orchard is located near his house and barns and has been occupied by a large number of swine for many years and has also been liberally fertilized, so these Spy apple trees are growing in what might be called very rich soil, both naturally and artificially. I would suspect however that Spy apples grown on rich soil like that mentioned would not come into bearing so early as Spy apple trees growing in sandy soil where the growth would not be so rank.

The general idea is that peach trees should be grown on sandy soil but this is not true. At Green's Fruit Farm we have succeeded well in growing both sweet chestnut and peaches on what might be classed as rather heavy clay loam.

My conclusion is therefore, that no person need be deterred from planting fruit trees, grape vines or berry bushes by the character of their soil no matter what it is. The most difficult soil to deal with in planting all of these fruits is stiff clay soil which breaks and cracks under the summer heat, and yet it is possible to secure productive orchards in such stiff clayey soil as this by excavating holes 2 feet across for each tree and filling these holes with loam or garden soil drawn in by horses and a wagon from adjacent fields, and by mulching each tree after planting with a forkful of strawy manure to hold the moisture.

The Helpful Toad

Appearances are deceiving, thus many people in writing on this subject speak of the ugly toad, as though he had no virtue. The truth is that under the dingy, warty and uncouth covering of the toad is a kindly disposition, a gentle and loving personality and a helpful agency to man.

The toad is considered a sleepy individual, but in fact there is no creature more wide awake. Here is evidence that those who judge from appearances are apt to be deceived. You may see the toad in your garden among the vines and vegetables, apparently drowsing or idling away his time, when in fact he is catching insects every minute, and often every second, and yet his tongue—which is hinged at the front instead of at the rear—flashes out so quickly, conveying the insect from the plant to his throat with such suddenness, your eyes cannot follow it, therefore you think the toad is dreaming when he is busily engaged in benevolent work.

There are many fables or untrue statements made in regard to the toad. Shakespeare speaks of the venomous toad. The common superstition is that if you handle a toad your hands will be covered with warts, probably on account of the roughness or wartiness of the skin of many toads, but this belief is utterly unfounded. Another error is in supposing that little toads come down to the earth from the clouds in summer showers. This idea is encouraged from the fact that the young toads creep out in large numbers from their hiding places in the grass or under foliage of plants, or under boards or rocks and stones, to enjoy the refreshing showers.

We are told that the toad is decreasing in numbers owing to the fact that the little ponds or pools in which their eggs are hatched are drying up all over the country.

The Apple Crop

In this year of scarcity of apples and high prices for apples we have nearly a full crop of this king of fruits at Green's Fruit Farm, but the average for this crop of the entire country may not exceed 50 per cent. of a full crop.

The Baldwin trees are bearing a full crop as are the Blenheim, known as Blenheim Orange and Lord Nelson. This variety bears every year and is one of the more profitable apples on our place. Its season is early winter. The fruit can be picked and sold in late September or October and sells for high prices.

Some of the odd varieties in our specimen orchard are not bearing this year, such as Bananas, McIntosh and others of that class.

Melon apple, a variety noted for its excellence, its beauty, its high quality, is heavily laden with large and beautiful fruit. The quality of all the apples at Green's Fruit Farm is better this year than it has been for a long time. This is said to be the condition in the Hudson river orchards, and some of the other localities of western New York. Whether this is owing to the moist, cool season or not, I am unable to state. Our orchard has been more carefully sprayed than ordinarily and it is difficult to find an apple that has been injured by an insect.

Yesterday I visited Green's Fruit Farm. The season has been cool and moist with frequent showers that have caused a remarkable growth in all of our plants, vines and trees. The weeds also have made an extraordinary growth and it has been almost impossible to conquer them entirely owing to frequent showers.

High Prices for Apples

I asked my superintendent if he were aware that \$3.00 per barrel was offered for Baldwins and Greenings this year.

His reply was that he would not sell his apples at \$3.00 per barrel as he expected to get higher prices, but \$3.00 a barrel is a good profitable price for apples. I am not prepared to state whether it would be wise to hold the crop for higher prices than \$3.00 but bear in mind that apples as graded in New York state last year and this year are worth more than in previous years, because they are more carefully graded under restrictions of state law.

The Leading Market Red Raspberry

While Syracuse red raspberry is the leading variety, the largest, most beautiful and of highest quality, Herbert, my superintendent said, was the leading market variety, far outclassing Cuthbert, which has heretofore been a leading market red raspberry. Herbert is a vigorous grower, hardy and abundant bearer of berries of larger size and brighter red than Cuthbert. Herbert is reasonably firm in texture.

The next Apple Day is the Third Tuesday in October

Every year Apple Day is becoming more generally observed in every part of this country. The United States is the greatest apple growing country in the world. It looks as though in the years to come America would be looked upon for the great supply of apples for the world at large.

I was told recently by a friend who is well informed, that one reason why the demand for apples from Europe the past year was so much greater than was expected on account of the war, was owing to the fact that a few years ago very large shipments were made to Europe at a low price, enabling people of moderate means to enjoy them for the first time. The apples thus shipped to Europe and consumed in large quantities have made a market for larger shipments, and it is expected that in the years to come there will be an increasing demand for American apples in Europe.

But our own country does not consume half as many apples as it should. The people need educating in regard to the value of apples as a wholesome food, almost absolutely necessary for health.

Let every locality celebrate Apple Day and do something or say something to encourage the planting and the eating of this king of fruits.—C. A. Green.

Farmers have organized their apple supervisory committee of sale will be the orchard Hook, following amount estimated of apples The sale commissi and Mar the depar catalogue in the sa that the vance of may be Foods and third stre following William Fraleigh, Gardner; Abram Clark & Co.

"For ex asked \$6, the receipt represents the price was prop \$8,000 and Andrews, being adv \$3,600, les The auction tunity to and at t should re supply and "If succe market with the state, such other operators

Monroe A

Yesterda the Court said to have ers than th case. E. the auction which bro Syracuse from New Mr. Wh and he say their succe tize the auc two weeks having am Twenty-fiv paid to the through th when the the best o yesterday, \$2.85.

State F

In an eff consumer State Food Redhook, afternoon, offering 30, bidders. T lot at \$2.7 1,350 barre highest pri largest lot While man bidding wa moters felt their expect taken into ment is you meet with there is fre tween the p those paid ducer and th had been ro of the high up men.

Fruits, cut board boxes weight than to transport.

Auction Sale in Western New York Apple Orchards

Farmers of the Hudson River valley have organized a public auction sale of their apples to be conducted under the supervision of the New York State Department of Foods and Markets. The first sale will be held on September 1st in the orchard of William E. Teator. Red Hook, and the second and third sales on the following day at Milton and Gardner. The amount of sale at the three auctions is estimated to be not less than 100,000 barrels of apples.

The sales are organized by John J. Dillon, commissioner of the Department of Foods and Markets, and will be conducted under the department's supervision. A complete catalogue of all the orchards represented in the sales will be presented to buyers so that the orchards may be inspected in advance of the day of sale. These catalogues may be obtained at the Department of Foods and Markets, No. 71 West Twenty-third street, New York, or from any of the following members of the local committee: William S. Teator, Red Hook; Harry D. Fraleigh, Red Hook; Andrew L. F. Deyo, Gardner; J. E. Hasbrück, Modena; Dr. Abram Palmer & Son, Milton; J. R. Clark & Son, Milton.

"For example Philip DuBois, of Gardner, asked \$6,000 for his crop a week ago. On the receipt of information furnished by a representative of the department he raised the price to \$7,000, and when the auction was proposed he increased the price to \$8,000 and sold at this figure. Lewis Andrews, in the same neighborhood, not being advised sold a larger orchard for \$3,600, less than one-half of its actual value. The auction sale will give buyers an opportunity to get their apples at a given time and at the market price. The growers should receive prices regulated by the supply and demand.

"If successful the plans of public auction market will probably be adopted all over the state, not only for apples, but for all such other farm products as wholesale operators care to buy in bulk at the farm."

Monroe Apples Will Be Sold at Auction

Yesterday apples were auctioned off on the Court House steps in Syracuse, and are said to have brought higher prices to growers than would otherwise have been the case. E. L. Goodsell, who is conducting the auctions, sold twelve orchards, one of which brought about \$20,000. Most of the Syracuse apples were bought by dealers from New York and Brooklyn.

Mr. White has been at all the auctions, and he says that the commission is elated by their success. The procedure is to advertise the auction and the apples to be sold for two weeks prior to the sale. Dealers thus having ample time to see the orchards. Twenty-five per cent. of the price bid is paid to the grower at the time of the sale through the commission; the rest is paid when the apples are removed. Apples of the best quality brought \$3.40 a barrel yesterday, and the lowest price listed was \$2.85.

State Has Auction Sale of Apples.

In an effort to bring the grower and the consumer closer together, the New York State Food and Market Department held at Redhook, Dutchess county, Wednesday afternoon, an experimental auction sale, offering 30,000 barrels in lots to the highest bidders. The sales included one orchard lot at \$2.75 a barrel, and another lot of 1,350 barrels, which went at \$3.25, the highest price. A bid of \$3.12 1-2 on the largest lot of 2,600 barrels, was refused. While many buyers were present and the bidding was spirited, some of the promoters felt that the results did not meet their expectations. It of course must be taken into consideration that the movement is young. One may hope that it will meet with some measure of success; for there is frequently such a difference between the prices paid at the orchard and those paid at the retail store that the producer and the consumer both feel as if they had been robbed, though at opposite ends of the highway, perhaps by the same hold-up men.

Fruits, cut and dried and packed in cardboard boxes with oiled paper, have less weight than canned preserves and cheaper to transport.

Where Trees Grow Near Line Fence Who Owns The Fruit?

Legal Decisions New to Green's Fruit Grower. Written for Green's Fruit Grower By HALTON D. BLY.

When fruit trees stand near the division line of adjoining owners, and the branches spread over the two farms, who owns the fruit? The question has troubled the owners, been productive of fist fights and settled by the Courts.

A case involving such a dispute was heard by the New York Courts many years ago, and the decision then given has been followed in many other states. It appears from the printed case that one Dr. Hoffman had a cherry tree which stood on his side of the line fence. The branches spread over the adjoining land of Mr. Armstrong. Dr. Hoffman told his sister to go out and pick the cherries and while she was doing so Mr. Armstrong came along and ordered her to stop. It appears, however, that she was bound to get the cherries and while endeavoring to stop her it was claimed that Mr. Armstrong was guilty of assaulting her. She sued him for the assault, and got a judgment of one thousand dollars. He claimed that he used no greater force than was necessary in defence of his property, and therefore, was justified in using force. The Court held, however, that inasmuch as the trunk of the tree stood upon Dr. Hoffman's land, he was entitled to all the fruit even though the branches projected over the land of his neighbor and when the neighbor attempted to prevent the gathering of the fruit, he was a wrong doer. It was further held, following the decisions of the Courts of England, that an adjoining owner does not have title to any part of a tree projecting over his land, unless the trunk of the tree stands on the line or on his side of the line, although it was admitted that there had been some cases decided otherwise.

But it does not follow that the man who does not own the trunk of the tree, has no rights or remedies. If he is damaged by reason of the overhanging branches, he can collect his damages. Moreover, if he sues for it, he is entitled to an injunction, restraining his neighbor from planting trees so near the boundary line as to injure him.

Which is the Best Vinegar?

Green's Fruit Grower Co.: Would you be kind enough to advise me which is the best vinegar to offer my customers, home-made or such as I buy from my jobber? The home product is often made of poor apples, or parings. I do not know what the commercial cider is made of, but I understand it is made of acid.—Geo. M. Hofmann, N. Y.

Reply: Generally speaking I advise you to offer as the best vinegar what you call home-made vinegar made from apple cider. Doubtless there is a difference in the quality of the cider made into vinegar, but I never saw any apple cider vinegar that was of inferior quality, although some is better than others and stronger. Good home-made cider vinegar when it is aged is apt to be too strong to be used with safety and must be diluted by the user. Otherwise it might cause people to choke, especially children.

Much commercial vinegar is made of the refuse or waste of distilleries. There is a method of making vinegar of apple cider quickly by allowing it to dribble through shavings and other substances in a tower, thus exposing it to the air. I assume that this hastily made apple cider vinegar is of good quality, but I have had no personal acquaintance with it.

Oregon's Apple Crop Small

Portland, Ore., Sept. 11.—Oregon's apple crop this year will be about one third as large as that of last season, according to an estimate made by C. A. Madour, manager of the Western Fruit Distributors' association.

All honest people or christians so called, should believe in spirits of other persons talking through us. If you listen to a speaker at a meeting or gathering, if you are careful you may recognize the sound of a friend's voice. What we often say or do is not from our own thoughts.



Make Your Old Trees Bear

Why let the old trees go to rack and ruin. Make them produce. Make them pay renewed interest on your past investment. Regenerate those old orchards and make the old trees bear.



RED CROSS DYNAMITE

will help you. By blasting and breaking up the subsoil around the trees, a new water reservoir is created, new plant food is made available and the old trees will be made to produce as well as before.

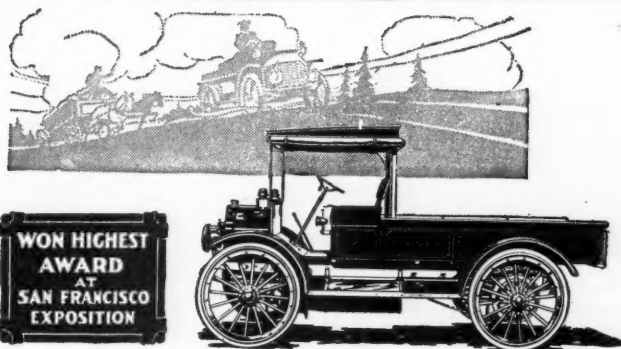
To learn how progressive orchardists and farmers are using dynamite for cultivating fruit trees, regenerating barren soil, ditching, draining, stumping, removing rocks and boulders and scores of other things, write for our well written and illustrated booklet F 31.

Du Pont Powder Company

Established 1802

Wilmington, Del.

When you write advertisers Please mention Green's Fruit Grower



International Motor Trucks

TIME is such an important factor in the marketing of fruit and vegetables, that any reasonable device for saving time receives earnest consideration. Perhaps the principal reason why International Motor Trucks are so popular among fruit and vegetable growers is because they save so much time on the road. Around the larger cities truck farmers buy International Motor Trucks because their produce is on the road from one to three hours less time and is, therefore, delivered in such good condition that it commands the best prices.

Add to this advantage the ability to see customers first, which an International Motor Truck gives, and add again the saving of time on the return trip, and you have three good business-getting, money-making reasons for buying an International Motor Truck.

There are also other good reasons which every fruit and vegetable grower should know and which it costs nothing to find out. Drop us a line and we'll send you complete information about our three motor truck models, "M" for 1,000-lb. loads, "E" for 1,500-lb. loads, and "F," the new International 2,000-lb. truck.

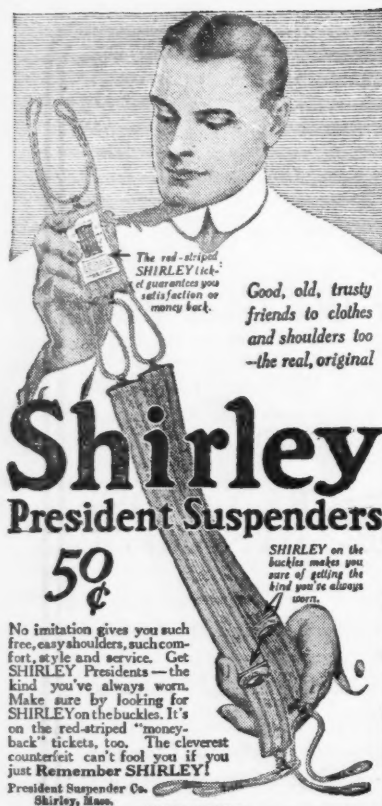
International Harvester Company of America

(Incorporated)

CHICAGO

USA

Champion Deering McCormick Milwaukee Osborne Plano



The red-striped SHIRLEY (tick) guarantees you satisfaction or money back.

Good, old, trusty friends to clothes and shoulders too—the real, original

Shirley

President Suspenders

50¢

SHIRLEY on the buckle makes you sure of getting the kind you're always worth.

No imitation gives you such free, easy shoulders, such comfort, style and service. Get SHIRLEY Presidents—the kind you've always worn. Make sure by looking for SHIRLEY on the buckle. It's on the red-striped "money-back" tickets, too. The cleverest counterfeiter can't fool you if you just remember SHIRLEY!

President Suspenders Co., Shirley, Mass.

Look for  on the Buckle

Delivered to FREE
on Approval and 30 days Trial

THIS 1916 Model  **Choice of 94 Styles**

SEND NO MONEY but write today for our big 1916 catalog of "Ranger" Bicycles, Tires and Sundries at prices so low they will astonish you. Also particulars of our great new offer to deliver you a Ranger Bicycle on one month's free trial without a cent expense to you.

BOYS you can make money taking orders for bicycles, tires, lamps, sundries, etc. from our big handsome catalog. It's free. It contains "combination offers" for re-fitting your old bicycle like new at very low cost. Also much useful bicycle information. Send for it.

LOW FACTORY PRICES direct to you. No one else can terms. You cannot afford to buy a bicycle, tires or sundries without first learning what we can offer you. Write now.

MEAD CYCLE CO., Dept. A-49, CHICAGO, ILL.

EXCELSIOR

RUST PROOF




Safety for Young Trees

Safety for young trees—first, last and all the time—from the ravages of gnawing small animals will be assured if you surround them with Excelsior Wire Mesh.

It is made for long wear, heavy galvanized to prevent rusting, reasonable in cost per tree. Sizes to suit the tree. Let us tell you how to eliminate all danger and worry at a low cost. Address for further particulars,

WRIGHT WIRE CO.
Dept. F, Worcester, Mass.

9½ CORDS IN 10 HOURS



RYN'S EASY No Backache Weighs only 41 lbs. Easily Carried

SAWS BOTH TREES

BY ONE MAN. IT'S KING OF THE WOODS. Saves money and backache. Send for FREE catalog No. B27 showing low price and LATEST IMPROVEMENTS. First order gets agency. Folding Sawing Mach. Co., 161 W. Harrison St., Chicago, Ill.

Farm Department

Farm Leases

When the land owner gets a good tenant he should make an effort to keep him. It will not pay to be overzealous in driving a bargain of this kind. The welfare of the farm is at stake. Farm leases should encourage the long time occupancy and the feeding of more live stock. A better system of tenant farming brought about by longer leases and the encouragement to feed live stock instead of growing grain for market, would be a mighty factor in rural improvement. The rented farm where no live stock is kept is easily recognized. It has a neglected, run-down appearance; and it is doubtful if either the owner or the tenant is getting satisfactory returns from it, says The Farmers Guide.

The short time farm lease is a curse upon American agriculture. No lease should be for less than three years, five would be better. With a one-year lease the tenant cannot arrange a system of crop rotation, so must get all he can off the land during the short time that he is to stay upon it. There is no encouragement to improve or even keep up the fertility of the land. The landlord who follows this practice belongs to the "penny wise and pound foolish" class.

Greater Profits for Farmers

American farmers will secure greater profits when they have learned how to market their products to the best advantage. They need in the first place the widest possible diversity of crops and next a keener knowledge of selling, says Nashville Banner.

The small inland city is the best place for disposing of farm products. Many sagacious farmers have private customers for their hogs, chickens, butter, eggs, etc. Where this is the case much more than the wholesale market price is obtained.

Those living within a few miles of a thriving city can secure private customers for fruit and vegetables, as well as for butter, eggs and poultry. This is the most profitable way of marketing. The farmer gains the middleman's profit and the customer is pleased to obtain fresh products without unreasonable trouble or expense.

These are articles that pay enormously compared to grain farming or dairying. They involve little expense or risk and their production serves to distribute the season's labor evenly and to make it more profitable than when it is confined to one or two products. So long as city populations develop at the ratio shown in the last decade there



The colt is an attractive feature on the farm. Almost all young creatures are fascinating and far more so than the same animal when fully grown. What can be more attractive than the newly hatched chicken, or the young pigs, the lambs, the puppies and the kittens. How proud the mother is of her colt. She seems to feel the additional dignity which is given her through motherhood. It is regrettable that the farmers of this country should have abandoned in a measure horse raising until there has come a famine in horses, which is felt now more than usual on account of the demand for American horses to reinforce the armies of Europe. The life of a horse in war is brief, the average being less than a year.

Boys on the Farm.

A Michigan man on a visit to Chicago wandered into a boy's club made up of youngsters in the congested districts of the city, says Rochester Herald. He found some of these boys greatly interested in the country, which they had never seen. It was to them a fairy land, where wonders were worked. The Michigan man is going to take twenty-five of these boys home with him and instruct them in the business of farming. If they do well, upon their graduation he will take another squad and repeat the process.

We are inclined to think that the twenty-five if they remain with him, will give him all he can do in that line for the next ten years. Farming is as difficult to learn properly as a trade. However, it can be made more alluring. That depends altogether upon the teacher. Give a boy a pig to take care of, a dozen hens and a plot of ground, and if he is worth shucks he will have the time of his life, and gain in health and strength. But, as we say, it depends upon the teacher. Farmers do not as a general thing try to make the farm attractive to their own sons, which is why they drift to the city as soon as they are big enough to go it alone. No boy who is given a share in his product ever voluntarily left the farm.—R. H.

will be no danger of raising too much fruit or truck.

The producer in disposing of honey, berries, cherries and other articles which come in the line of fancy farming gets twice as much by selling to private customers as to commission houses. It makes a lot of difference whether a man with an orchard receives \$1.25 or \$2.50 a bushel for cherries.

It pays well to be able to furnish in their season such articles as strawberries, currants, cucumbers, cherries, apples, raspberries, sweet corn, cabbage, honey and other products of the kind.

These pay ten times as much as the grain crops. An acre of cherries or apples will net about \$150 after paying for the labor of picking and marketing. The others are equally profitable, or nearly so.

The markets have never yet been oversupplied. In fact they seem to be further from that condition today than ever before.

Moving Month for Nature

For many of the birds and insects October might be called the fall moving month, for it is then that nature sends many of these creatures on long pilgrimages in quest of winter quarters. Wherever you go in the country you will see unmistakable evidences

that summer is over, and that nature is preparing her children for the cold weather soon to come.

Hurrying along the paths and highways are numbers of queer-shaped and queer-colored caterpillars. Some are naked, some are covered with stiff bristles, while others have rings of hairs, about their bodies. Regardless of obstacles they go steadily onward, climbing stone walls, logs, stumps, or whatever else chances to block their path. The natural inquiry is: "Where are these caterpillars going?"

Having fulfilled their summer's mission as foliage and plant destroyers, they are now hunting for a suitable place to hide, shed their caterpillar disguise, and undergo a wonderful transformation that will turn them into butterflies and moths. Some of them do not begin these pilgrimages until it is too late in the season to complete the change before winter begins. In such cases the caterpillars, or, the chrysalides into which they turn before making the final change, must wait until the warmth of spring nurses them back to an aerial life. Although it is a long delay for the belated ones, they are fortunate in one respect. Had they become butterflies or moths late in the fall, the cold weather would have cut their career short in a few days, whereas the spring arrivals enjoy a much longer lease of life.

The life of most insects is ended when winter begins. The blade-faced hornets have but a few more weeks. It seems strange, too, that just as they have finished their queer paper mansions they should be cut down by the frost. The queen hornet is the only one that has intelligence enough to leave her home at the approach of winter and take shelter under a bed of leaves or other suitable location that will protect her. Since early summer these intelligent little creatures have been at work on the co-operative plan. At first, the queen is house builder, cell maker, egg layer, food provider, and nurse; but as the colony grows, her responsibilities are lessened, and the work is systematically divided among the house carpenters, cell carpenters, food suppliers, and nurses. The carpenters gather fibres from weatherbeaten boards and glue them to the outside layers of the nest, and when room is needed for egg cells they tear away the inner layers and use the material for outside work.

Here is Andrew Carnegie's recipe for securing a good wife: "Pick a girl who takes care of her mother—the girl who is useful in the household and does not make the most show in the ball room." Andrew knows quite a number of things besides the secret of making money.

FRESH AT NIGHT

If One Uses the Right Kind of Food.

If by proper selection of food one can feel strong and fresh at the end of a day's work, it is worth while to know the kind of food that will produce this result.

A school teacher out in Kans. says in this connection:

"At the time I commenced the use of Grape-Nuts my health was so poor that I thought I would have to give up my work altogether. I was rapidly losing in weight, had little appetite, was nervous and sleepless, and experienced, almost constantly, a feeling of exhaustion.

"I tried various remedies without good results; then I determined to give particular attention to my food, and have learned something of the properties of Grape-Nuts for rebuilding body, brain, and nerves.

"Since using Grape-Nuts I have made a constant and rapid improvement in health, in spite of the fact that all this time I have been engaged in strenuous and exacting work.

"I have gained twelve pounds in weight and have a good appetite, my nerves are steady and I sleep sound. I have such strength and reserve force that I feel almost as strong and fresh at the close of a day's work as at the beginning.

"Before using Grape-Nuts I was troubled much with weak eyes but as my vitality increased the eyes became stronger.

"I never heard of another food as nutritious and economical as Grape-Nuts."

"There's a reason."

Name given by Postum Co., Battle Creek, Mich.

Ever read the above letter? A new one appears from time to time. They are genuine, true, and full of human interest.

We must apple, even is a living through a object of the fruit its attraction marketing

A correct losses in accurate kind destroying. These des (2) skin

Types

Decay organisms down of fungus organs which attack the and those penetrate caused by the large Ph largely by correct stor

Types of

Skin ble physiological coloration superficial development

The Pro

Practically handling and life in storage prevention blemishes with

- (1) The v
- (2) Correc
- (3) The m
- (4) Care i
- (5) Promp
- (6) The co

The type grown, the a the fruit are keeping qual be mentioned be classed up Other things greatest influ storage, since by his cultur life that it c

The In

Temperatur factor in the the fruit. T taken as sta two years' ex considerably decay develop F. than in th three degree centages were storage. Con in handling take the place ing.

A delay in influence of a found to res troubles. Th activities of t at a higher t approaches the it would if t promptly by a

Influenc

Apples pick best keeping making picks apart, and the or four differer in these exper this factor is experiments w season. This maturity, held no loss from sc

Cold Storage of Apples

By A. W. McKAY, of the Bureau of Plant Industry,
U. S. Dept. of Agri., Wash.

We must keep clearly in mind that the apple, even after it is picked from the tree, is a living organism, and that it passes through a definite space of existence. The object of storage is to conserve the life of the fruit as long as possible and to maintain its attractive appearance throughout the marketing period.

A correct interpretation of the causes for losses in storage will depend upon an accurate knowledge of the type of troubles destroying the market value of the fruit. These destructive factors are (1) decay, and (2) skin blemishes.

Types of Losses Due to Decay.

Decay may be caused by (a) fungus organisms or (b) the physiological breaking down of the fruit. The general types of fungus organisms which cause fruit rots are those which are saprophytic and unable to attack the sound, unbroken skin of the fruit, and those which are parasitic and able to penetrate the unbroken skin. The rots caused by saprophytic organisms comprise the largest proportion of the fungus decays of fruit in storage, and can be controlled by correct handling methods. The parasitic fungi causing the decay of fruit in storage are usually orchard diseases which may be controlled by cultural sanitation. Physiological decay is controlled largely by proper handling methods and correct storage temperatures.

Types of Loss Due to Skin Blemishes.

Skin blemishes may be due to (a) physiological disturbances, causing discoloration of the skin of the fruit, or (b) superficial fungus growths, such as the development of the scab fungus on apples

The Prevention of These Losses.

Practically every factor in the growing, handling and storage of the fruit affects its life in storage. The partial or complete prevention of loss from decays or skin blemishes will depend directly upon:

- (1) The vitality of the fruit.
- (2) Correct orchard sanitation.
- (3) The maturity of the fruit at picking.
- (4) Care in all handling operations.
- (5) Prompt storage.
- (6) The correct storage temperatures.

The type of soil on which the fruit is grown, the age of the trees and the size of the fruit are also important factors in its keeping quality. Many others might also be mentioned, most of which could probably be classed under "Vitality of the Fruit." Other things being equal, the grower has the greatest influence on the behavior of fruit in storage, since he in a large measure controls, by his cultural and handling methods, the life that it contains.

The Influence of Temperature.

Temperature is the most important factor in the control of the life activities of the fruit. Thirty-two degrees F. may be taken as standard for the apple. In the two years' experiments, it was found that considerably less scald and physiological decay developed in fruit held at 32 degrees F. than in that held at 35 degrees F., only three degrees higher. Still higher percentages were found in fruit held in common storage. Common storage has vast utility in handling the apple crop, but it cannot take the place of cold storage for long holding.

A delay in getting the fruit under the influence of storage temperature was also found to result in an increase in storage troubles. This delay permits the life activities of the fruit to go on very rapidly at a higher temperature and the fruit approaches the end of its existence sooner than it would if these activities were retarded promptly by a low temperature.

Influence of Time of Picking.

Apples picked at full maturity have the best keeping quality. This was tested by making picks from the same trees ten days apart, and the leading varieties from three or four different sections have been included in these experiments. The importance of this factor is strikingly illustrated by the experiments with the Rome Beauty last season. This variety, picked at the proper maturity, held until April 1 with absolutely no loss from scald, while fruit from the same

tree picked ten days earlier showed 55.4 per cent scald when it was withdrawn from storage, and after it was held outside ten days this percentage had increased to 92.8 per cent. Over maturity, however, may cause as serious loss as immaturity. The picking of certain varieties at the proper time means a saving of thousands of dollars to the apple industry.—Copyright by the Fruit and Produce Distributor.

HOW ANIMALS SLEEP.

In Elephant Herd Some Are Always on Guard.

Elephants sleep standing up. When in a herd a certain number will always stand watch while the others sleep, for the big, powerful beasts are timid and cautious at night and will not go to sleep unguarded.

Bats sleep head downward, hanging by their hind claws.

Birds, with few exceptions, sleep with their heads turned tailward over the back and the beak thrust beneath the wing.

Storks, gulls and other long-legged birds sleep standing on one leg.

Ducks sleep on open water. To avoid drifting ashore, they keep paddling with one foot, thus making them move in a circle.

Foxes and wolves sleep curled up, their noses and the soles of their feet close together and blanketed by their bushy tail.

Lions, tigers and cat animals stretch themselves out flat upon the side. Their muscles twitch and throb, indicating that they are light and restless sleepers.

Owls, in addition to their eyelids, have a screen that they draw sideways across their eyes to shut out the light, for they sleep in the daytime.—Our Dumb Animals.

Ancient Bee-Culture.

From the earliest days the honey-bee has roused the poet and philosopher to admiration. That apiculture is no modern craft we find from the writings of the Roman Virgil, who, from his farm above Naples, tells us such delightful tales about his bees amongst the lemon trees, and from Pliny some hundred years later, who gives them an interesting chapter in his natural history. Centuries before the birth of Christ boatloads of ancient beehives floated up and down the Nile, following the circle of the summer season, and the bees probably reveled in the bowers at Babylon's gardens, even as they do among the hollyhocks of today. We still get the Grecian honey, redolent of wild thyme, and the bees we see gathering the nectar on Hymettus's rocky slopes are doubtless direct descendants of the subjects of Aristotle's meditations.—Suburban Life.

I have told you of the Spaniard who always put on his spectacles when about to eat cherries, that they might look bigger and more tempting. In like manner I make the most of my enjoyments; and though I do not cast my cares away, I pack them in as little compass as I can, and carry them as conveniently as I can for myself, and never let them annoy others.—Southey.

How to Fish With Grasshoppers.

Outing.

In fishing with grasshoppers it is better to fish down stream whether following the bank or wading; somehow you can give the insect a more natural motion when the hopper is going away from you, than you can when it is approaching, as is the case if one fishes upstream. During your entomological days in college you learned that most of our grasshoppers were true locusts, and when you use 'hoppers for trout bait, it is a locust and not a grasshopper that turns the trick. Pass by the green, soft-bodied insects, true grasshoppers; also never look a second time at the great, dry-winged brown fellows, locusts, but it is a medium sized, moist, brown-bodied fellow, almost luscious in appearance, that you should select.

'Tis apple day, sweet apple day,
Ther's lots of 'em around;
So now you may—yes, now you may
Eat 'em right off the ground.

"Sprayed 16,000 Trees—No Repairs"

—so says one of our thousands of satisfied customers, Mr. J. A. Bingaman, Pillow, Pa. He did the work with a Goulds "Pomona" Sprayer, shown below. This two-hose, four-nozzle sprayer can't be beaten for use in small orchards, and where labor is cheap, is used in large orchards—several machines taking the place of a large power outfit. Wearing parts are of solid bronze. Large steel air chamber gives uniform pressure. Easily adjusted and cleaned. Fits any barrel. It's only one of 50 styles and sizes of hand, barrel and power sprayers, made at the largest pump works in the country.

GOULDS RELIABLE SPRAYERS

are guaranteed; backed by 65 years' pump-making experience. Write our nearest office for valuable 44-page book, "How To Spray." It is free. Send for your copy today.

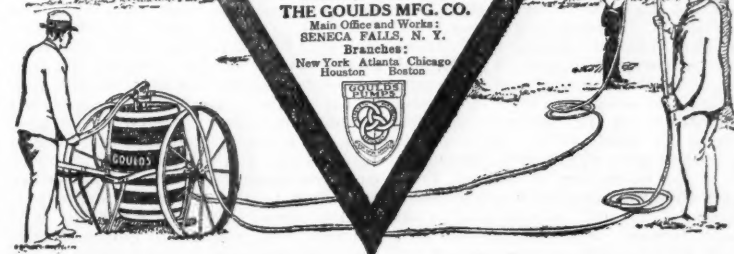
THE GOULDS MFG. CO.

Main Office and Works:
SENECA FALLS, N. Y.

Branches:

New York Atlanta Chicago

Houston Boston



10 Days Free Trial Charges Prepaid Send No Money NEW KEROSENE LIGHT Beats Electric or Gasoline

TWICE THE
LIGHT

HALF THE
OIL

Awarded
GOLD MEDAL
at World's
Exposition
San
Francisco



common coal oil, and gives more than twice as much light as the best round wick open flame lamps. No odor, smoke or noise, simple, clean, no pressure, won't explode. Several million people already enjoying this powerful, white, steady light, nearest to sunlight. Guaranteed.

\$1000 Will Be Given

to the person who shows us an oil lamp equal to the new Aladdin (details of offer given in our circular.) Would we dare make such a challenge if there were the slightest doubt as to merits of the Aladdin? We want one user in each locality to whom we can refer customers. Be the first and get our special introductory offer under which you get your own lamp free for showing it to a few neighbors and sending in their orders. Write quick for 10-Day Absolutely Free Trial. Just say, "Show me how I can get a strong white light from kerosene oil, without risking a cent." Address our nearest office.

MANTLE LAMP COMPANY, 192 Aladdin Building
Largest Kerosene (Coal Oil) Mantle Lamp House in the World
CHICAGO, ILL. NEW YORK CITY PORTLAND, ORE.

We don't ask you to pay us a cent until you have used this wonderful modern light in your own home ten days—we even prepay transportation charges. You may return it at our expense if not perfectly satisfied after putting it to every possible test for 10 nights. You can't possibly lose a cent. We want to prove to you that it makes an ordinary oil lamp look like a candle; beats electric, gasoline or acetylene. Lights and is put out like old oil lamp. Tests at 33 leading Universities and Government Bureau of Standards show it

Burns 50 Hours on One Gallon

**Men Make \$50
to \$300.00 Per Month
With Rigs or Autos**
delivering the ALADDIN on our easy trial plan. No previous experience necessary.

Practically every farm home and small town home will buy after trying. One farmer who has never sold anything in his life before writes: "I sold 51 lamps the first seven days." Another says: "I disposed of 37 lamps out of 31 calls." Thousands who are coining money endorse the Aladdin just as strongly.

NO MONEY Required
We furnish capital to reliable men to get started. Ask for our distributor's plan, and learn how to make big money in unoccupied territory. Sample sent for 10 days FREE TRIAL.

Get Wholesale Prices

We Pay the
Freight
and Ship
Within
24
Hours



on stoves, ranges, base-burners, cook stoves, gas stoves, etc., from Kalamazoo factory.

WRITE for 1916 catalog—see new styles—1916 prices.

300,000 satisfied customers endorse Kalamazoo offer—low wholesale price—30 days' trial—year's test—cash or easy payments—\$100.00 guaranty. We pay freight and start shipment within 24 hours. Mail postal today for catalog—also receive new 1916 souvenir, "Recipes in Rhyme." Both free. Ask for Catalog No. 316

KALAMAZOO STOVE CO., Mfrs., Kalamazoo, Mich.

We manufacture stoves, ranges, gas stoves, furnaces and white enameled metal kitchen cabinets and tables. Mention which catalog wanted.

**"A Kalamazoo
Trade Mark
Registered Direct to You"**

Our Greatest Service

Is to Instruct our Readers in Selling Fruit

Yesterday our friend H. H. Charles, active business man of New York City, called at the office of Green's Fruit Grower, and among other things made this interesting and helpful suggestion. Said he: "One way, and probably the most useful way, in which Green's Fruit Grower can be most helpful to its subscribers is in instructing them in the marketing of their various farm products."

I readily conceded that Mr. Charles was correct in this conclusion, for I am and have been for a long time aware of the fact that the marketing or selling end of the fruit grower and the farmer is the weakest spot in his affairs. I have long known that while some men are selling their strawberries, peaches and other small fruits, and some of the larger fruits, at a low price, yielding little profit, others in the same locality are selling their products at much higher prices which yield a large profit. This is the reason why I have continually said to the subscribers of Green's Fruit Grower that fruit growing requires better business plans and management than ordinary farming. If a man has a hundred bushels of wheat, corn or oats, he may not be able to get a higher price for this produce than his neighbor, but if he has a field of strawberries or an orchard of peaches or other fruits, it is possible for him by good management to secure much higher prices than his neighbors.

Here is an illustration that Mr. Charles gave from actual experience. A farmer in New Jersey was what they call a truck gardener, producing cabbage, lettuce, potatoes, tomatoes, melons, cucumbers and other items of this class. His usual market in New York city and Philadelphia was so low that he could not sell his produce there with profit. What did he do? Did he sit down and complain? No. He had three stalwart sons. He called them before him and said: "Boys, I want to take you into partnership with me in business."

"That interests us," was the reply of the boys, who were anxious to hear what the father had to say.

"My plan is this: Get three of your friends to join you and start three truck autos, with the least delay possible, for Atlantic City, each gasoline truck laden with such produce as we have to sell, arranged and basketed in the best possible way to attract the attention of customers, dealing direct with the consumer, going from house to house. You will be my partners and will share in the profits of this new scheme."

The boys were wide awake and hit upon the plan of having baskets filled with several products, each basket being somewhat different from the others as to the contents, so that they might fit the wants of different patrons as regards cost and contents. In this way they would offer a family a certain basket of supplies for 25 cents, containing perhaps apples, cabbage, onions, lettuce, beets, carrots, an assortment or collection which would make it as easy as possible for the buyer to decide upon what to purchase and to make the lot attractive also in price. They found this method remarkably successful, and the truck gardener closed his season, which promised on the start to be disastrous, with a satisfactory profit.

This induces Green's Fruit Grower to suggest to its readers that they be not satisfied with following precisely the same methods that their neighbors or their fathers or grandfathers have pursued for many years, but to branch out into some new plan or method of selling their produce.

And here I would like to speak a good word for the auto truck. We have one at Green's Fruit Farm and are astonished at its usefulness there. We can easily make two or three trips with this gasoline auto truck, where formerly we made one with the teams. This enables us to reach the markets early. It will not be long before every progressive farmer and fruit grower has one of these gasoline machines with which to market his products.

Peddle, Peddle, Learn to Peddle.

Green's Fruit Grower's advice is, and has been for years, that its subscribers shall learn to peddle. This is what C. A. Green did when he started out as a poor man at Green's Fruit Farm. His early money was made by peddling fruit from door to door. While previously he had spent fifteen years in a city bank, he was not ashamed to

peddle strawberries, raspberries, blackberries, grapes, currants, peaches, apples or whatever he might be producing.

Most farmers dislike peddling. I see no reason why they should do so, for it is not hard or objectionable work. Most people will be surprised to learn how much even a one horse wagon load of mixed items in the way of fruits and vegetables will yield in money when peddled to farmers and villagers within a circuit of 5 to 25 miles from the farm, as is the case at Green's Fruit Farm. My experience is that you should not expect to meet with notable success in peddling your fruits when you first begin to do this work. After you have sold your fruit direct to the consumer for several months or years, you will find your patrons waiting for you to arrive with your load of produce. You will have established a reputation among these buyers for good fruit, for which the consumer will in most instances pay you a profitable price, much more remunerative than could be secured by selling to the grocers or shipping to distant cities. Do not forget to have different sized packages of grapes or other fruits, as suggested in the remarks of Mr. Charles above.

In New York state efforts are being made to sell carloads of apples, peaches and other fruits at auctions. Sometimes these auctions are held in the orchard to be sold, but more often the auction sales are made in carload lots at the terminals in New York city. This plan of selling by auction sale is experimental. While some look upon it with favor, others fear it will not be a permanent success.

Advertising the fact that you have apples or other fruit for sale, by circulars and by cards placed in each package, is a method of selling which fruit growers are just beginning to take up or inquire into. As advertising in any way is a profession it should be adopted with caution, beginning in a moderate way for the purpose of selling fruit. At Green's Fruit Farm we have practiced advertising and in this way have built up a permanent trade of moderate dimensions, the same parties who have ordered of us in previous years continuing their orders. No one could hope to build up a trade of this kind without gaining the confidence of patrons by careful grading and the shipment of well grown fruit. Fancy varieties like McIntosh Red, Banana, Mother, Melon and Fameuse are the varieties best calculated for this kind of trade.

Here is an illustration of what advertising may accomplish, though in this instance no advertising was intended and the result was a surprise. A peach grower who had had no experience in advertising either by circular or by periodicals, telephoned to town ordering two auto trucks to call at his orchard at once and load up with peaches which were picked and ready for sale in the local market the next day. Meanwhile several hundred baskets of beautiful peaches were deposited near the highway along which many automobiles filled with tourists and excursionists from the nearby city were continually passing. Though there was no sign up or placard calling attention to these peaches, many automobiles stopped and inquired if they were for sale and the price. Then a sign was put up, "Sun Kissed Peaches for Sale." The result was that almost every automobile passing that way departed with from one to four baskets of peaches. At the end of a few hours the entire lot of peaches was sold and the astonished fruit grower was obliged to telephone to the owners of the auto trucks that they need not call as the peaches were all disposed of at home.

This illustrated the fact that fruit growers must study the question of advertising their products. One way would be to have a sign put up on the highway, announcing that superior apples, peaches, pears, plums, quinces or grapes were on sale here. I have noticed this year for the first time an innovation in fruit selling. The growers of peaches in the vicinity of Rochester, N. Y., have advertised in the daily papers, announcing that sun kissed peaches of superior size and quality could be purchased at the fruit farm of Jones & Sons at Firefly Fruit Farm. You might suspect that these advertisements would not attract much attention so long as the grocers at Rochester were well supplied with peaches, but the fact is that these grocery peaches were not of superior quality and that many of our

citizens were looking for the very highest grade of peaches and were willing to go out of their way to secure them.—Charles A. Green.

WESTERN N. Y. APPLE DEAL

More Activity in Buying Reported

Dealers Were Taking Baldwins, Greenings, Kings and Spys, of Grade "A," at \$2.50 @ 3.25 Barrel—Evaporated Fruit.

More active buying of apples was reported in the western New York belt the past week. Quite a few dealers said they had been buying Baldwins, Greenings, Kings and Spys at \$2.50 @ 3.25 per barrel. Some of the dealers said they had been taking quite a few orchards at the rate of \$1 per 100 pounds. There is a disposition among the local buyers to pay \$2.50 @ 3 for grade "A" Baldwins and other winter varieties, late reports showing that the crop is going to be short on fancy Baldwins.

One of the local dealers who returned from a trip through the territory west of Rochester said that there had been quite a little buying at \$3 @ 3.25 for grade "A" fruit, but that many of the growers had set their mind on \$3.50 for standard "A" Baldwins and Greenings measuring two and a half inches, and were holding out for that price. There are some fine Baldwin orchards up-state that will run from 75 to 90 per cent of grade "A" fruit and these are held at \$3.50, grower to pick, pack and deliver.

So far the growers have not taken any very active part in the plans looking toward a state auction sale of apples in Rochester this fall, and the dealers are not in favor of it.

Some of the local evaporated apple men made some purchases of green fruit the past week. They said they had to pay three times what they did last fall. Owing to the high prices asked by growers, there has not been much buying by the dried fruit men. The demand for evaporated apples has also been limited, and there have been only a few inquiries for futures during the past week. One of the dealers offered prime cold storage evaporated apples at 7½¢, while another asked 7¾¢ @ 7½¢. The future market was easy at 7 @ 7½¢ per pound for October-November prime, delivered.

Save Your Seed Corn

Corn growers are advised to save seed corn from the crop of 1914 for the planting of 1916, since in some sections of this country the corn crop of the present season may not mature perfectly thus may not be suitable for seed.

Mr. Green:—I wouldn't give one copy of "Green's Fruit Grower" for all the other magazines published. It is a source of great assistance to me in my work and look with pleasure at each new issue. At the end of the year I bind them all together in one Volume. Thanking you for your good paper and wishing you health and success, I am respectfully, W. E. Zerkle, Ohio.

All there exists on this earth came from growth with aid of water. First two elements were fire and water. Water makes fire and fire makes water.



OUR WATCH-DOGS

—Pease in the Newark News

Small Fruit Planting

There are greater possibilities in the growing of small fruits and berries for market than is commonly supposed, says Western Fruit Grower. Some years ago my father and I decided to try this plan, and the results have exceeded our expectations. While as yet we have not been able to supply the demand for our product, the returns have been satisfactory, and the outlook for future years of berry growing is excellent. It is a mistake to suppose that only very fertile soils will grow berries successfully. While light, rich soils are naturally best adapted to their growth, proper methods of building up and maintaining the productivity of the soil will give good results, even on very poor land. For the farmer who feels that he is not good for many more years of hard labor at ordinary farming, or for the young man who is not financially able to purchase a larger farm, fifteen to twenty acres of land managed in this way will bring more net profit, with less labor, than twice this amount of land handled in the ordinary way. While berry culture lacks the hard labor of grain farming, it is no job for the idler, and the owner must expect to make his hands and brain work together if he expects to make money for himself in this way.

It is best to go a little slow for the first few years. Experience is the best school, and if the beginner invests his all in anything with which he is not familiar, disappointments are apt to occur, and the novice will condemn his experiment as a failure. While nearly everyone familiar with farms and farming understands pretty well the care and culture of most varieties of berries, the marketing end of the game puzzles many beginners, and if left to their own resources to find an outlet for their products, many growers may fail in marketing, after they have been successful in every other way. It is for the benefit of such that we are speaking, as we believe no difficulty will be experienced along this line if the grower plans ahead and manages carefully. In the first place, it is best for the grower to build up his market as he goes along. For the first few years the home towns within a radius of ten miles will doubtless be able to handle the products of two or three acres devoted to small fruit and berry growing.

C. A. Green says "Plant Currants and Gooseberries in October and November, also Grape Vines, blackberries, raspberries and all hardy trees."

YOU CAN GET THE FINEST PEACHES DIRECT FROM THE ORCHARD

This is a "Peach Year"—so figure on what fruit you will need—as next year will unquestionably be an "off year" for peaches.

We are now booking orders for the delivery of choicest Selected Elbertas, which will be ready to pick in a week, or very near it. Exceptionally fine fruit; large in size and perfect in shape. Hundreds of specimens on the trees measure seven to nine inches in circumference.

We'll deliver these Elbertas to you in SIXTEEN QUART BASKETS at 60c. Out of town orders shipped by Express, prepaid for 85c.

When you consider the price of this fruit, consider the size of the baskets, as the bulk of Peaches are packed in 10 and 14 quart carriers.

Above is sample of cards sent out by W. N. Y. Peach Growers.

Cost of Distributing Food.

It costs thirty-nine cents to distribute one dollar's worth of food in New York City. The bureau of food supply of the New York Association for Improving the Condition of the Poor has been conducting a cost of living inquiry, and made public a report to-day showing that sixty-one cents represents the cost of the food on its arrival at the terminal markets here while the rest of the consumer's dollar is divided between wholesaler and retailer in the process of getting the food to the consumer's kitchen.

Testimonial

Green's Fruit Grower:—Please extend my subscription for another three years for which inclosed find P. O. order for one dollar.

Your paper has a great amount of valuable information especially for the orchardist I could hardly afford to be without it for twice the price.—Ray C. Ayres, Lansing, Mich.

Making Cider Vinegar

Written for Green's Fruit Grower by J. S. UNDERWOOD, Illinois

As with most other things there are several more or less definite steps for us to take in making vinegar of good and standard quality. Manufacturers of cider vinegar of commerce follow these rules and as a result make a uniform product, and we should do the same.

To begin with it may be well to clearly understand than in making vinegar from apple juice there are two distinct steps to be taken. Ordinary apples contain from 8 to 12 per cent. of sugar, the exact amount depending upon the variety of the apple and the climate in which it is grown. The first step in making cider is to allow the sugar to ferment and change to alcohol. Yeast organisms bring this about. The second step consists in allowing the alcohol to ferment and change to acetic acid, which is the acid of vinegar.

Commercial vinegar must contain 4.5 per cent. of acetic acid. If it contains less than that it is considered adulterated, and not much more than that can be obtained from pure apple juice. As a matter of fact commercial vinegar is not apt to contain more acid than the law requires. One hundred parts of sugar, upon fermentation yield 45 parts of alcohol and one hundred parts of alcohol yield 120 parts of acetic acid. In other words 100 parts of sugar in apple juice yield 54 parts of acetic acid. To make vinegar containing 4.5 per cent. of acetic acid the pure apple juice undiluted with water must be used. If water is added the full strength cannot be obtained. Furthermore the flavor is also injured by the addition of water.

In preparing apples for the press it is important to see to it that they are clean. This is to insure obtaining the right fermentation. Soiled apples may contain many different species of bacteria and fungi, and among them may be varieties that would produce undesirable fermentations. The apples should be washed before the juice is pressed out of them. All decayed portions should be removed also.

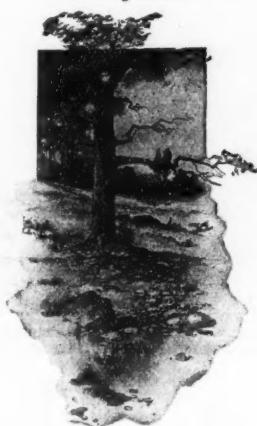
The most convenient and best receptacle in which to make cider is a wooden barrel. A whiskey barrel is all right. Fill it from two-thirds to three-fourths full of clear apple juice and then add one compressed yeast cake to each five gallons of juice. It is not absolutely essential to add the yeast cake, since the yeast plants will be found present in the apples, but by adding yeast the alcoholic fermentation will take place more rapidly, and that lessens the chances of undesirable ferments getting an opportunity to act upon the juice. The temperature at which sugar changes to alcohol with the greatest rapidity is 70 degrees F., but the fermentation will take place very nicely at any temperature between 60 and 85 degrees. At 70 degrees the fermentation will be completed in about three months. The cider should then be syphoned out of the barrel and strained and the barrel thoroughly cleaned and scalded. The cider may then be returned to the same barrel and the acetic acid fermentation allowed to proceed.

To three-fourths of a barrel of cider obtained as here mentioned add three quarts of good vinegar and a small amount of "mother of vinegar." This will insure rapid fermentation of the right kind. The best temperature for the acetic fermentation is also 70 degrees, but it will take place at a considerably lower as well as at a higher temperature. At 70 to 75 degrees the fermentation will be complete in from five to six months. At a lower temperature more time will be required.

The change from alcohol to vinegar can be made only in the presence of air, hence the barrel should be kept open while this fermentation is taking place. An occasional stirring of the liquid hastens the process in that it keeps the liquid well supplied with air. Stirring is not essential, however. It only hastens the fermentation process. The change of sugar to alcohol requires no air, still it is necessary to keep the bung hole of the barrel open while it is in progress, since carbonic acid gas is one of the by-products of the change, and this must be given an opportunity to escape. To close the bung hole with a wad of cotton is a good plan in the alcohol fermentation and this will also answer the purpose while the alcohol is changing to vinegar.

When the acetic acid fermentation is complete draw off the vinegar into jars and seal to shut out the air so that no further

fermentation can take place. If this is not done the vinegar will begin to slowly deteriorate in quality, since further fermentation changes the acetic acid to other products. By following these directions as closely as possible a first-class vinegar will be obtained and one that, if placed on the market, will bring the highest price.



Valuable Trees

Written for Green's Fruit Grower by FRANK MONROE BEVERLY

As trees are the life of a landscape, so trees at the roadside lend a charm that nothing else does. Who has not noticed how imposing a tree looks when standing alone? It seems that all the grandeur of the forest is concentrated in that one tree. While commercialism is rank, has not the poet commanded,

"Woodman, spare that tree,
Touch not a single bough;
In youth it sheltered me,
And I'll protect it now?"

Leave a tree here and there; along the road, upon the knoll, or in the lane, for the sake of keeping off the painful sense of monotony that could not otherwise be escaped. If the mistake of completely deforesting the landscape has been made, suppose you take the initiative in planting a tree in each place where it pleases your taste, and invoking your fellows to "protect it now." You may not live to enjoy the sight of the stately tree from the insignificant plant, but future generations will do so, and doubtless they will bless your memory.

Good Street Trees

For streets from 60 to 90 feet between buildings, pin oak, oriental plane or sycamore, and Norway maple are said to be desirable, says Cornell Bulletin. The Norway maple is tough and hardy, has few insect enemies, but has the disadvantage of being broad and low-headed so that it does not allow of the passage of wires where overhead wires are in use. In order to provide ample growing space the trees should be planted 40 feet apart. For wide streets where there is more than 90 feet between buildings the American elm, red oak, and sugar maple are advocated. For these trees the space should be not less than 50 feet between trees and where possible they should be planted well inside of the curb line.

The sugar maple is particularly attractive and desirable, but it needs a good deal of moisture. Pin oak is excellent for both narrow and average streets, and is also desirable as individual specimens for the lawn. Contrary to general opinion in regard to oaks, it is a fairly rapid grower and it shares this quality with red oak.

American elm is said to be the handsomest and most satisfactory shade tree in this country, mainly because of its high arching branches which shade but do not smother, allowing free passage of air beneath the tree itself. Some objection has been made to the elm tree because of the depredations of the elm-leaf beetle, and other insect pests, but this can be readily overcome. In other words, the authorities of the college of agriculture say that the farmer might as readily refuse to raise potatoes because of potato bugs, or decide against planting an orchard because of San Jose scale. The various enemies of the elm tree are easily overcome. One high

Beats all how Prince Albert will ring true!

From the start you'll enjoy every puff of a pipe or hand-made cigarette packed with Prince Albert! *Don't* have to be introduced; *don't* have to fire-proof your tongue; *don't* have to do any old thing but lay low on the shade-side of the lane and hum and smoke-smoke-smoke! The patented process makes that possible—and cuts out bite and parch!



Here is a photograph of one of the finest types of Indians now living, Chief Eagle Shirt, an ardent pipe smoker, who hails from the Pine Ridge Reservation. The Chief is 32 years old, and is one of the star attractions with "101 Ranch."

It sers up your smoke-desires most astonishingly chummy, so cool, so mild, so mellow, is every aggrant puff of

PRINCE ALBERT

the national joy smoke

You get out your best Sunday jimmy pipe or some makin's papers and let Prince Albert sing its sunny smoke song in the language *your tongue* and *your palate* will know right quick! Give it a real try-out, and there'll be no doubt about P. A. being your side-partner in the immediate future!

Realize, it can't cost you more than 5c or 10c to prove that Prince Albert is all the most ardent enthusiast ever claimed for it!

Prince Albert is sold everywhere in tappy red bags, 5c (handy for rollers); tidy red tins, 10c; pound and half-pound tin humidors—and in clever crystal-glass pound humidors with sponge-moistener tops that keep the tobacco in the finest possible condition.

R. J. REYNOLDS TOBACCO COMPANY
Winston-Salem, N. C.



You can go after bear, moose, deer, with the confidence that brings success if you shoot the

Marlin

Big Game Repeating Rifle

MADE in all popular big game calibres—guns of splendid accuracy, range and power.

They have Special Smokeless Steel barrels, and the quick, reliable Marlin lever action. All have the protecting solid-top, side-ejecting safety construction; can't freeze up or clog with snow, rain, twigs, dirt or sand; empty shells never thrown in the shooter's face.

Send 3 stamps postage for big catalog to help you select right gun.

For smaller game, lever action rifles in .22 to .44 calibres; "pump action" rifles in .22, .25 rim-fire, .25-20, .32-20; repeating shotguns, 12, 16, 20 gauges.

The Marlin Firearms Co.
39 Willow Street, New Haven, Conn.

power sprayer is sufficient to give all the elms in an average sized city or town a good spraying, promptly and efficiently, at a cost not to exceed 20 cents a tree.

Horses, cows, goats, and sheep are perhaps of the noble deer stock. Dogs are of the lion, tiger, wolf and fox family, and from larger animals degraded by rebirth of an untimely death. Cats may be of the tiger and lion family also, and the leopard family. All these small presentday animals are like a large photograph reduced.

MORE FRUIT from your trees if you keep them free from San Jose Scale, Aphids, White Fly, etc. by spraying with

GOOD'S CAUSTIC POTASH SOAP No. 3

Kills all tree pests without injury to trees. Fertilizes soil and aids healthy growth. FREE Our valuable book on Tree and Plant Diseases. Write today.

JAMES GOOD, Original Maker, 953 N. Front St., Phila.

Trees—Plants—Vines

In small or large lots at wholesale prices. Catalog and Green's Fruit Book—FREE. Green's Nursery Co. 91 Wall St., Rochester, N. Y.

The New REO the Fifth



\$875

SPECIFICATIONS

The New Reo the Fifth—\$875

Wheel Base—115 inches.

Springs—Front—Semi-elliptic—38"x2" with 7 leaves. Rear—three-quarter elliptic. Lower section—44 1/2"x2" with 7 leaves; upper section 22 13-16"x2" with 7 leaves.

Front Axle—I-beam, drop forged, with Timken roller bearing spindles.

Rear Axle—Tubular—semi-floating, Timken roller bearings at differential—Hyatt High Duty roller bearings at wheels, pinion integral with stub shaft—two universal joints in propeller shaft

Tires—34"x4" front and rear. Non-skid on rear.

Motor—Vertical, four-cylinder, cast in pairs, modified L type with integral head, with inlet valve in head. Valves mechanically operated and protected.

Cylinder Dimensions—4 1/2"x4 1/2".

Horsepower—35.

Cooling System—Water jackets and tubular radiator cellular pattern.

Lubrication—Automatic force feed by plunger pump with return system.

Carburetor—Automatic, heated by hot air and hot water.

Ignition—Combined generator and magneto, driven through timing gears with 100 ampere hour storage battery.

Starter—Electric, separate unit, six volt, connected to transmission.

Transmission—Selective swinging type with single rod center control.

Clutch—Multiple dry disc, faced with asbestos with positive instant release.

Brakes—Two on each rear wheel, one internal, one external, 14" diameter drums — service brake interconnected with clutch pedal.

Steering—Gear and sector with 18" steering wheel.

Control—Left-hand drive, center control—spark and throttle on steering wheel with foot accelerator.

Positive—Thief-proof locking device.

Fenders—Drawn sheet steel of latest oval type—shield between running boards and body—close fitting, quick detachable under pan—aluminum bound, linoleum covered running boards.

Gasoline Capacity—16 gallons. Air pump on dash for emergencies.

Body—Five-passenger—streamline touring car type with extra wide full "U" doors, front and rear. Genuine leather upholstery. Deep cushions and backs.

Finish—Body, Golden Olive, running gear, black; equipment nickel trimmed.

Equipment—Fully electric lighted throughout; improved 5-bow, one-man mohair top with full side curtains; mohair slip cover; clear-vision rain vision; ventilating windshield; speedometer; electric horn; extra rim with improved tire brackets; pump-jack; complete tool and tire outfit; foot and robe rails.

Price—\$875, f. o. b. Lansing, Mich.

Here Are The New REO Models and

Look at the Cars, Consider the Values, and Read Carefully the Explanation of These Prices

WE FEEL WE MUST EXPLAIN to our more intelligent readers why and how it is possible to place such cars in your hands at such unheard of prices.

FOR WITHOUT THAT EXPLANATION—without reasons so logical they must satisfy you—you could not understand, could not accept, these values as genuine.

OF COURSE THE PRICES ALONE would not astonish—might not even interest—you. For mere price taken by itself, indicates nothing to the intelligent buyer.

BESIDES YOU'VE BEEN SURFEITED with announcements of "big cars at little prices"—this year more than ever before.

MOST MAKERS SEEM TO HAVE LOST THEIR HEADS in the fierce battle of price competition. As a result you've seen price reductions that indicated to your mind clearly one of two things—either that the value was not there last season or couldn't be this.

SO MERE PRICE—EVEN THESE sensational new Reo prices—would interest you only mildly if at all.

BUT KNOWING AS YOU DO REO STANDARDS of excellence in materials and manufacture; knowing as you do the Reo reputation for making only cars of sterling quality; knowing and estimating as you will, Reo integrity in selling as well as in making, you must marvel at these prices.

YOU KNOW THESE TWO REOS—you know that in all the world there have never been two models that enjoyed greater popularity.

AND RIGHTLY SO—for we maintain that these are the ripest, the most refined, and the most nearly perfect automobiles ever turned out of any factory—simply because they have been made in their present form—in all essentials—for more years than any others, and more time, and more experience, more skill, and more care have been devoted to refining and perfecting them.

BOTH REO MODELS—Reo the Fifth, "The Incomparable Four," and the new Reo Six—have long since passed the experimental stage. Both have been tried and proved—and not by factory testers, but by thousands and tens of thousands of owners, and in every land.

THINK WHAT THAT MEANS. Consider the satisfaction it is to us to know—to know absolutely—that every car that leaves this factory in the coming year will carry with it absolute satisfaction—absolute certainty of satisfaction—to its new owner.

THIS YEAR OF ALL YEARS we are glad we have nothing radically new, nothing experimental—nothing even doubtful or questionable to offer our hosts of friends.

OF COURSE WE CONSIDERED this matter from every angle. We are conversant—have been for months—with everything others were trying to do.

OUR ENGINEERS ARE JUST AS ALERT as others—just as enterprising and just as prone to experiment and to explore new and interesting fields. They enjoy working mechanical puzzles just as keenly as any. But—

MOST OF ALL WE CONSIDERED it from the standpoint of those thousands and thousands of friends who have learned to lean upon us, secure in the belief that we will offer them nothing but that of which we ourselves are sure.

"BUT THE PRICES?" YOU ASK. "Why and how were these necessary and possible. Why necessary—how possible for this product, not merely as good as formerly, but better?"

WE WILL ANSWER THAT QUERY.

IT WASN'T NECESSARY—any more than it was necessary to devote the thought and the energy and the expense to the improvement of cars that already represented values so great that every Reo car was snapped up the instant it came from the factory.

IT WASN'T NECESSARY either to improve the quality or to reduce the price—except that it is and always has been the Reo desire to give Reo buyers greater value than could be obtained elsewhere and just as much more as our greater experience and superior facilities could give.

BUT IT WAS POSSIBLE—and that was sufficient. THE REASON IS INTERESTING—interesting and instructive and makes mighty profitable reading to any prospective buyer of an automobile.

A COMBINATION OF FACTORS and conditions that are, we believe, unique with Reo, made these prices for these quality-cars possible.

NO; PRICES OF MATERIALS HAD NOTHING to do with it—prices of no important materials are lower, while prices of many are higher now than a year ago. Only way cost of materials in a car can be reduced this year is by reducing quality of materials—using inferior or substitutes. YES; THERE IS ANOTHER WAY—the simple expedient of reducing the amount of materials. In other words, reducing the weight of the car.

FOR IT IS A FACT THAT YOU CAN reduce the cost of an automobile twenty-five per cent by the simple process of cutting the weight down that much. Some do—to the danger point, we believe.

REO CARS ARE LIGHT CARS—but not light to the point of flimsiness. They are as light as may be without sacrifice of safety or durability.

SO THAT EXPEDIENT of cutting down the amount of materials that go into the car was not to be thought of, any more than was the other of using materials of inferior quality or substitution.

IN THE MAKING OF REOS this year we are using—not better because they are not to be had—but the same quality of materials as formerly. So that isn't the reason for the lower price.

COST OF MAKING IS, HOWEVER, somewhat less, thanks to the fact that in many ways we have been able to reach a still higher degree of efficiency.

ONE BIG ITEM IN COST REDUCTION of these two models was the fact that both had passed the experimental, the uncertain stage.

WHEN WE TELL YOU that, had we found it necessary to project a new model to take the place of either of these, we would have set aside a fund of at least \$100,000 to defray the cost of the experiment—and would have doubled the amount had our plan been to supplant both—you will see where we have been able to place to the credit of Reo buyers for the coming year a fund of at least \$200,000.

IT TAKES AT LEAST THREE YEARS to perfect any new automobile model. Anyway it takes that long to get a car to the point of perfection where we are willing to offer it to Reo buyers and back it with the Reo guarantee.

ANOTHER ITEM THAT HELPED tremendously was the fact that the tool cost on both these famous models had long since been absorbed—charged off—permanently disposed of.

Reo Motor Car Company, Lansing, Mich.

The New REO "SIX"

\$1250

Mod and The New REO Prices

and Your Astonishment Has Somewhat Abated,
tion of these Prices were made Possible

AT IS A BIG ITEM. You'd be surprised—unless you also are a manufacturer—to know how big.
PERHAPS THE MOST IMPORTANT factor in the reduction of manufacturing cost and at the same time the making of a better product, was to be found in Reo itself.
EVER SINCE THE DAY REO WAS incorporated has there been a single change in the personnel of the executive organization.

THE SAME PRESIDENT presides who occupied the chair at the first meeting of Reo.

THE SAME GENERAL MANAGER DIRECTS; the same engineer designs; the same expert handles the funds; the same purchasing agent buys; the same factory superintendent oversees; and finally, the same men direct the sales, who have handled these important departments since the first Reo was designed and made and sold.

WE'VE LEARNED WE'VE KEPT right in the Reo organization.

IN THE FACTORY: Do you know there are scores of men in the Reo factories today working on these latest Reo models who worked on the very first Reo? Hundreds who have been here six to ten years.

THERE AGAIN WE CAN SAY "All we've learned we've kept." Every man has become a specialist—is an expert—in his particular task.

CONTRAST THAT with the kaleidoscopic changes you've seen in this new industry—changes so frequent and so radical that today you can find no one to back up the guarantee of the car you bought yesterday.

WISH YOU COULD COME and visit us at the Reo factory. Wish you could talk with Reo workmen—the rank and file as well as the directing heads. You'd know then the reasons for the superior quality of Reos.

REO DEALERS ARE RESPONSIBLE—the credit is theirs—for the biggest item. For, but for the unprecedented action and the hearty co-operation of hundreds of Reo Distributors we could not have placed these cars in your hands at these prices.

THE FACTORY ORGANIZATION the Reo Dealer organization has been with us from the first. Many of the principal Reo dealers have sold Reos exclusively ever since the first Reo was made.

TAKE THEM INTO OUR CONFIDENCE to a greater degree than is usual in this business. We have no secrets from them.

AT'S WHY REO DEALERS are so loyal—they know—they do not guess, they know—that in Reo cars they give their customers more value than they can find elsewhere.

ALL THIS SEASON WE WERE CONFRONTED with a problem—price competition to an extent greater than ever before.

REO DEALERS INSISTED that, even though fortified with Reo quality and prestige, still they could not wholly ignore price competition.

CONTENDED that price did not matter; that it fooled no one—or at most only a small percentage of buyers and they not the most desirable.

WE SHOWED THEM that the cost of making Reos could not be materially lessened without reducing the quality—and that our plan was to improve the quality wherever possible.

WHY, WE REO FOLK wouldn't want to be in business if we couldn't feel we could make better cars this year than last; next year than this!

WE SET OUR OWN STANDARDS and will always ignore those of others—at least when they trend downward!

BUT THEY PROTESTED that the average buyer saw only the price tag. That while he saw the reduction in price he did not notice the reduction in quality—in value. So they wanted a competitive price on Reos as well as Reo quality in the product.

THERE WAS ONLY ONE WAY it could be done—that was if the dealers would agree to handle Reo cars on a smaller margin of profit than is the rule with other cars. We told them that if they would agree to that, we could set a price on Reo cars that would create a genuine sensation.

AND THEY AGREED! It is an unprecedented action. And that the hundreds of Reo Distributors assented to the plan was due to another unique condition—namely, the extremely low cost of selling and of giving service on Reo cars.

A CANVASS SHOWED this remarkable fact: That the average cost of the dealer's guarantee on a Reo car—the cost of keeping it in perfect running order and its buyer thoroughly satisfied was less than six dollars per car per year!

JUST COMPARE THAT with the cost of maintaining some makes of cars.

WHY, ONE OF OUR DEALERS who handled two other lines last season—but who declares, most vehemently, he will handle Reos exclusively hereafter—tells us that the average cost to him per car on one of those lines was \$60 and on the other \$49—while Reo averaged in his case \$4.75 per car per year!

AND THAT WASN'T ALL. The factor that Reo Distributors consider most important is the customer—satisfied or the reverse. For you must know that though that dealer spent \$60 to keep a certain car running he still could not keep the man to whom he had sold that car satisfied—not even by taking it back and standing the full loss himself.

HE COULD NOT REIMBURSE him in dollars for the delays, the disappointments and the aggravations he had suffered.

SO REOS WILL BE SOLD in the future on a lesser margin from dealer to user (and factory margin has always been as close as was safe) than any other automobile in the same class or of higher price.

AND YOU AS A REO BUYER get the full benefit.

AND YOU GET MORE THAN THAT. You get more than a Reo at the unprecedented price.

YOU RECEIVE AN ASSURANCE, a guarantee that cannot be over-estimated—in the fact that Reo cars have proved so good—so absolutely dependable—so economical in upkeep and operation—so wonderfully satisfying to their owners that those dealers feel they can handle them on that small margin.

WE THINK WE HAVE PROVED TO YOU *how* and *why*, and therefore, that you *do* receive a higher percentage of value for your money when you buy a Reo than is possible in most, or perhaps any other automobile.

SPECIFICATIONS

The New Reo Six—\$1250

Wheel Base—126 inches.

Springs—Front—Semi-elliptic—38" x 2" with 8 leaves Rear—Cantilever—50 1/4" x 2 1/4" with 8 leaves.

Front Axle—I-beam, drop forged with Timken roller bearing spindles.

Rear Axle—Full floating, Timken roller bearings at differential and at wheels—two universal joints in propeller shaft.

Tires—34" x 4 1/4" front and rear. Non-skid on rear.

Motor—Vertical, six-cylinder, cast in three, modified L type with integral head, with inlet valve in head. Valve mechanically operated and protected.

Cylinder Dimensions—3 1/8 x 5 1/4".

Horsepower—45.

Cooling System—Water jackets and tubular radiator cellular pattern. Water circulation by centrifugal pump direct to exhaust valves.

Lubrication—Automatic force feed by plunger pump with return system.

Carburetor—Automatic, heated by hot air and hot water.

Ignition—Combined generator and magneto, driven through timing gears with 100 ampere hour storage battery.

Starter—Electric, separate unit, connected to transmission.

Transmission—Selective swinging type with angle rod, center control.

Clutch—Multiple dry disc, faced with asbestos, positive instant release.

Brakes—Two on each rear wheel, one internal, one external, 14" diameter drums—service brake interconnected with clutch pedal.

Steering—Gear and sector with 18" steering wheel.

Control—Left-hand drive, center control—spark and throttle on steering wheel with foot accelerator.

Positive—Thief-proof locking device.

Fenders—Drawn sheet steel of latest oval type—shield between running boards and body—close fitting, quick detachable under pan—aluminum bound, linoleum covered running boards.

Gasoline Capacity—18 gallons. Tank in rear with Stewart Vacuum System supply.

Body—Seven-passenger—"Sheerline" touring car type with extra wide full "U" doors front and rear. Genuine No. 1 hand-buffed, enameled finished leather upholstery. Deep cushions and backs.

Finish—Body, Golden Olive—running gear, black—equipment nickel trimmed.

Equipment—Fully electric lighted throughout; improved 5-bow, one-man, mohair top with full side curtains; mohair slip cover; clear-vision, rain-vision, ventilating windshield, speedometer; electric horn; brackets; power tire pump; jack; complete tool and tire outfit; foot and robe rails.

Price—\$1250, f. o. b. Lansing, Mich.

Comy, Lansing, Mich, U. S. A.

What a Man Thinks

Some women marry because they haven't the courage to remain single. Some women marry because a man has asked them to and they don't like to say "no." Some women marry because they want a little more money in their purses and a larger credit at the stores. Some women marry because they want to put "Mrs." on their visiting cards and the word wife on their tombstones. Some women marry for money—money, and nothing else. And with it there come responsibilities of which they never dream. Some women marry because they love the man; because they want to be his wife, his friend, and his helpmate; because they want to make him feel that there is one woman in the world whom he can love and cherish, and from whom he will receive love and consideration in return; because they want to make him feel that if sorrow comes he has a sympathizing, loving friend close beside him, and that in the day of joy there is one who can give him smile for smile. These are the only women worth marrying.—Providence "Journal."

Live your life while you have it. Life is a splendid gift. There is nothing small in it, for the greatest things grow by God's law out of the smallest. But to live your life you must discipline it; you must not fritter it away in unfair purpose, erring act, inconstant will, but must make your thoughts, your words, your acts, all work to the same end, and that end not self, but God. That is what we call Character says Florence Nightingale.

The Deadly Dishcloth

This is the age of the discovery of deadly germs. Our kitchens should be free from germs of disease. The dishcloth in the average kitchen is pestilential. It can be freed of germs by washing with soap and immersing it for fifteen minutes in boiling water, then hanging it out in the sunshine to dry. Have at least six dishcloths and keep them clean. Think of eating your food from a plate that has been rubbed with a cloth infected with disease.—C. A. Green.

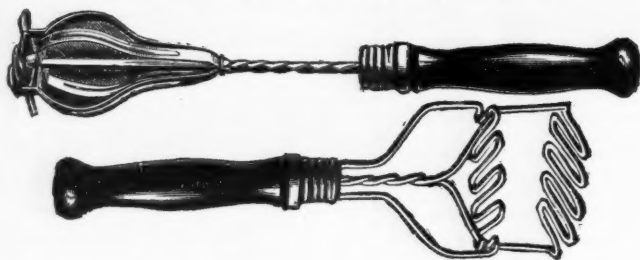
"Why do people have silver weddings, pa?"
"Just to show to the world what their powers of endurance have been."—"Judge."



PARKER'S HAIR BALSAM
Cleanses and beautifies the hair. Promotes a luxuriant growth. Never fails to restore gray hair to its youthful color. Prevents hair falling. 50c. and \$1.00 at Druggists.

Make Your Kitchen Work Easier

with one of these A. & J. Kitchen Sets.



One Hand Dover Egg Beater

Push down on the handle and the wings spin around rapidly. Operates perfectly in any dish or bowl, even in a tea cup. No wheels to clog, and does not splash. Requires but one hand to operate. Absolutely sanitary.

Compound Potato Masher

Does twice the work in half the time, with half the labor. Makes the potato white and fluffy. Used the same as an ordinary masher, but cuts through the potato in two directions with one stroke.

**Built for Long Wear
Guaranteed to Give Perfect Satisfaction**

HOW TO GET A SET: Send us one three year subscription (new or renewal) to Green's Fruit Grower, together with the \$1.00 to pay for same, and we will forward you one of these sets by parcel post, all charges prepaid. "There's No Time Like the Present," so send at once.

Green's Fruit Grower, Co., Rochester, N. Y.

Woman's Dept.

God thought to give the sweetest thing
In His almighty power, and deeply
pondering
What it should be—one hour
In fondest joy and love of heart
Outweighing every other,
He moved the gates of heaven apart
And gave to earth—a mother.
—G. Newell Lovejoy.

Tested Recipes

For grape catsup, take ripe, but not soft ones, and to five pounds of grapes add two and a half pounds of sugar, one pint of vinegar, two or three ounces of mixed spices, and salt to taste, then boil till it thickens and bottle when cold.

Peach Pudding

Fill a pudding dish with whole peeled peaches and pour over them two cups of water. Bake until tender, drain off the water and put aside to cool. Add to the juice one pint of milk, four well beaten eggs, one cup of flour, one teaspoon baking powder, one cup of sugar, one tablespoon of melted butter and a pinch of salt. Beat well together and pour over the peaches in a dish. Bake a rich brown and serve with cream.

Plum Conserve

Stone and chop finely ripe Damson plums. To each quart (after they are chopped) add two cupfuls of chopped and seeded raisins, six sour oranges chopped fine, with some of the yellow peel grated in (rejecting the outside), and five cupfuls of sugar. Cook slowly until it is thick and transparent, and turn it into glass jars.

Picallili

One gallon finely chopped cabbage, two quarts each tomatoes and onions chopped. (If one does not want onions double tomatoes.) Four pounds brown sugar (white will do), two ounces white mustard seed, two tablespoons salt, one-half each of ground white pepper, allspice and celery seed, one teaspoon ground cloves, two quarts vinegar. Boil spices in vinegar, add cabbage, etc. Cook until tender. Seal.

Pickled Peaches

Make a syrup of two quarts of best cider vinegar and 6 pounds of granulated sugar. Place this in a kettle with a spice bag containing one tablespoon of whole cloves and 1/4-pound stick cinnamon. Pare and halve the peaches, leaving in an occasional stone for flavor. Cook the peaches in the syrup until tender, then place in glass jars and cover with the vinegar syrup, which should be the consistency of maple syrup. The peaches may be left whole if preferred.

Corn Salad

To make a most delicious salad that may keep in airtight jars for winter use, cut corn from two dozen roasting ears; chop fine two heads of cabbage and one dozen mangoes; add four tablespoons of English mustard, two cups of sugar, two tablespoons of salt, one and one-half teaspoons of turmeric and two quarts of vinegar. Boil these ingredients 20 minutes in a granite kettle. Put in air-tight jars. This will make about five quarts of salad.

Economical Rugs

Editor of Green's Fruit Grower:—Rugs have so many advantages over the old fashioned carpets, that we cannot help wondering how we endured these heavy dust gathering floor coverings so long. Perhaps we cannot have the Wilton and velvet rugs that look so tempting when displayed upon the racks in the furniture stores, but there are a great many home made rugs that are artistic and durable.

If you have an ingrain carpet that is too much worn for further service, dust it thoroughly and cut it in strips one and one fourth inches wide. Ravel the threads about one fourth of an inch on each side, sew the strips like carpet rags, and wind them into balls. A carpet weaver will furnish the chain and weave them, making them any size you wish. Small rugs are usually preferred to large ones, because they are easier to handle. These rugs are especially suitable for the dining room and living room, and are handsome enough for any home.

The most popular rugs however, are those made of the rags that accumulate in every home, prepared and woven like the old fashioned carpet, except that they are usually made heavier. The expense connected with making them is so small that there is no reason why any housekeeper cannot have as many as she wishes, and they will do a great deal toward making a room look cheerful and homelike. Save the rags until you have enough for the rugs, and if they are to be made with hit or miss centers of every color, use the short lengths for them, mixing them thoroughly before you begin sewing, so the colors will be evenly distributed. Tear the rags in strips, the width depending upon the weight of the material used. The sewing may be done on the machine, lapping the ends of two pieces and sewing across, then sew the next two pieces without raising the machine foot. When you have finished, cut the threads and wind into large balls. Bright colored borders are used across the ends of the hit or miss rugs, and it is well to use the white rags for them, dyeing them the colors you wish with diamond dyes. A shaded border of red and green is pretty for a dark rug. Outlining the border with a narrow stripe of black adds greatly to the effect, and these stripes may be made of old stocking legs, cutting them round and round, making a long spiral of each one. Clouded effects are desirable for the borders of rugs if the centers are plain. Use white rags for them, and make them into skeins, then tie bands of rags around each skein in two or three places before dipping in the dye. The part that is bound will be lighter in color than the other. It is not necessary to stir them when they are put in the dye for you do not want them an even color. In the living room with mission furniture, shades of brown and tan are pretty, especially if the walls are tan or brown. Blue, old rose, pale green and lavender are pretty in the bed room, and nothing is more suitable than these light colored, light weight floor coverings.—E.J.C.

Patterns for Women Who Sew.



1454—Ladies Coat with or without Yoke facing. Cut in 6 sizes: 34, 36, 40, 42 and 44 inches bust measure. It requires 2 3/4 yards of 44-inch material for a 38-inch size. Price 10c.

1449—Ladies' 8-Gore Skirt. Cut in 6 sizes: 22, 24, 26, 28, 30 and 32 inches waist measure. It requires 5 1/4 yards of 36-inch material for a 24-inch size, which measures 31-8 yards at the foot. Price 10c.

1287—Ladies' House Dress. Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires 5 1/4 yards of 44-inch material for a 36-inch size. The skirt measures 22-3 yards at its lower edge. Price 10c.

1431—Ladies' Apron. Cut in 3 sizes: Small, medium and large. It requires 4 7/8 yards of 27-inch material for a medium size. Price 10c.

1457—Girls' Dress. Cut in 4 sizes: 4, 6, 8 and 10 years. It requires 3 yards of 40-inch material for a 4-year size. Price 10c.

1456—Girls' Dress with Tucker. Cut in 4 sizes: 6, 8, 10 and 12 years. It requires 1 1/2 yards of 27-inch material for an 8-year size for the gump and 4 yards of 24-inch material for the dress. Price 10c.

1448—Costume for Misses and Small Women. Cut in 3 sizes: 16, 18 and 20 years. It requires 6 3/8 yards of 36-inch material for a 16-year size. The skirt measures about 22-3 yards at the foot. Price 10c.

1455—Ladies' Dress. Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires 6 1/2 yards of 36-inch material for a 36-inch size. Price 10c.

Order patterns by number and give size in inches. Address Green's Fruit Grower Co., Rochester, N. Y.

If manu
over the g
now.

Good ha
many of o

Mulchin
from free
thawing al

Ripen t
will assu
the layers

In no ca
to grow wi

You sh
better if p
must be s
them a sta

The gro
though he
than any c

Farmers
growers m
able apple

October
comparati
are busy r
a supply
Plant the
spring co
There are
continual
way to do

H. H. G.
200,000,00
This is tw
we now ar
sides impo
tina, butt
China. V
While we
the worst
We are rol
the man
The press
on our o
person mu

Ap
Append
all, if we
H. G. Lyo
Egyptian
Camera C
grew and
Egyptians
of a girl w
and anat
to make o
had suffer
lently had
the same
by Mr. G
able pictu
in the tom
ands of ye
clerk to r
quite as
script."

Ros
The roa
that any
Dr. Willia
can Natur
The bird,
form and
He thus de
"It is a
with a tail
and legs t
seem like
toes are lo
the neck a
has a cons
Although
them, and
smaller th
Mice, l
insects are
that it is m
suspicious
movements
and high v
runner "g
sent habits
will be able

Jellies a
wines and

Orchard and Garden Notes

If manure has not already been scattered over the garden and plowed under, do it now.

Good honest work to do is a panacea for many of our troubles.

Mulching isn't to keep the strawberries from freezing, but to keep them from thawing after the ground is frozen.

Ripen the pears in a dark place. They will assume a fine color if ripened between the layers of woolen blanket.

In no case should small grain be allowed to grow within six feet of the newly-set tree.

You should know that most bulbs do better if planted in October, because there must be some warmth in the soil to give them a start.

The grower of fruit is a fortunate man, though he often thinks he has more troubles than any one else.

Farmers who would be successful apple-growers must learn what a good marketable apple is, and then grow it.

October and November are seasons of comparative leisure. The spring months are busy months. Do not put off planting a supply of fruit trees, plants or vines. Plant them this fall. If you wait until spring comes, you will put it off again. There are thousands of people who are continually putting off planting fruits. The way to do anything is to do it now.

H. H. GROSS. In fifty years we will have 200,000,000 people in the United States. This is twice as many as we now have and we now are eating all we can produce, besides importing corn and beef from Argentina, butter from holland and eggs from China. We must eat less or produce more. While we have plenty of land, America is the worst-farmed country in the world. We are robbing the next generation, leaving the man impaired heritage in the soil. The pressure is already becoming so great on our output that the least observing person must heed the call.

Appendicitis Not Modern.

Appendicitis is not so modern a fad after all, if we may believe the report of Captain H. G. Lyons, former director of the British Egyptian Survey. He recently told the Camera Club in London that appendicitis grew and flourished even among the ancient Egyptians. Not long ago, he said the body of a girl was discovered in a tomb at Assouan and anatomists who examined it were able to make out beyond all question that she had suffered from appendicitis, so excellently had the soft tissues remained. At the same meeting in the course of a lecture by Mr. G. A. Wainwright, many remarkable pictures were shown of the markings in the tombs, and it was stated that thousands of years ago it was the custom for the clerk to wear his stylus behind his ear, quite as he does now.—Boston "Transcript."

Road Runner is Odd Bird.

The road runner is such a strange bird that anything told about it is believed. Dr. William T. Hornaday, in his "American Natural History," is credulous himself. The bird, he says, "is remarkably odd in form and also in its habits," says N. Y. Sun. He thus describes it:

"It is about the size of a small crow, with a tail as long as its entire body and head and legs that are so long and strong they seem like those of a grouse, save that the toes are longer. The body is slender, but the neck and head are large and the head has a conspicuous crest. The beak is large. Although the bird has wings it seldom uses them, and they must constantly be growing smaller through disuse."

Mice, lizards, snakes, centipedes and insects are provender. The doctor testifies that it is most nervous of birds, abnormally suspicious and phenomenally quick in its movements. It flies little, but leaps far and high with closing wings. If the road runner "goes on 10,000 years in its present habits" it will cease to fly at all and will be able to leap 20 feet in the air.

Jellies are a very good substitute for wines and butter.

Grape Juice Made in the Chautauqua Grape Belt.

The "wine of to-morrow," as it is hopefully termed by C. Houston Goudiss, is the subject of a descriptive article contributed by him to *The Forecaster* (Philadelphia, August.)

"The picking or harvesting of the grapes is a period of great activity. Every one in the region gets busy and works just as fast as possible. The yield is tremendous and the season is exceedingly short. Scarcely more than a month can be given to the harvesting, yet thousands of tons of grapes must be picked and carried to the factories in that short time. It requires a high degree of efficiency and cooperation on the part of growers, pickers, and packers in order to accomplish the work."

"When the grapes arrive at the factory they are carefully inspected and weighed, then the grapes are thoroughly washed by mechanical sprayers that remove every particle of dirt and dust and every insect that may have clung to the grapes. In the best of grape-juice factories, after the grapes have been washed, the human hand does not touch them or the juice. From the washers, the grapes are carried by conveyers to rollers, which crush them to such an extent that the skins are broken, and the separation of the grape from the stems easily accomplished by the next set of machines."

"After the stems have been removed by these ingenious machines, the mass of partly crushed grapes, known as 'must,' goes into large kettles, where it is heated in order to loosen the color in the skins of the grapes and to free the sugars and flavors. From this mass of 'hot must' are made the 'cheeses' that go into the presses. These 'cheeses' consist of about two thousand gallons each of grape—must roughly enclosed in heavy cotton-cloth. A number of these 'cheeses,' with lattice-work racks between them, then go to the presses, where a pressure of about a hundred and ten tons squeezes out the juice. In one factory in the Chautauqua district the presses discharge over 140,000 gallons of juice every twenty-four hours during the season."

"From the presses the juice is conducted to the Pasteurizing kettles, in which it is heated to a temperature sufficiently high to kill all the yeasts and ferments. Then it is run into bottles or carboys holding five gallons, which, of course, are also sterilized, and kept in these bottles until the entire grape-crop is pressed, after which the juice is rebottled in various-sized smaller bottles for marketing."

"The greatest value of grape-juice in the dietary is as a delicious, refreshing beverage, one which meets the human need for a satisfying drink, but which does not inebriate. It is consumed for its flavor rather than for its nutritive qualities, but, nevertheless, it has considerable food value and, compared to most beverages, is very high in nutrients."

"It contains a small percentage of protein and fat, but its chief food-value lies in its sugar (or carbohydrate) content (about 20 per cent.). It is also rich in mineral salts, chiefly calcium, potassium, sodium, and phosphorus, and has a fuel-value of about 430 calories per pound. The advantage of grape-juice as a source of sugar and of energy lies in the fact that the sugar is a natural one and is easily assimilated. It is valuable, therefore, for people with weak stomachs who must get their nutriment from those foods which do not tax the organs of digestion. It is as a beverage, however, that grape-juice is at its best. It is delicious, convenient, and satisfying, and lends itself to such easy manipulation on the part of the housewife that it is coming to be widely used for all kinds of social affairs. Its purity, cleanliness, and healthfulness make it an ideal beverage for the children—it nourishes them as well as delights their palates."

"One should be sure, however, as is the case in purchasing all food-products, that the bottle of grape-juice is backed up by a responsible firm and that the particular brand of juice has been proved by expert investigation to be pure, clean, and free from artificial preservatives. A careful reading of the labels on the bottles will generally give the purchaser an idea of the purity of the contents."

The best fruit always brings the best prices. Never mix good fruit with the culls, for the culls will drag down to their own level the price for the good fruit.

New Net Weight Food Package Decision

The United States Department of Agriculture has decided to extend until January 1, 1916, the privilege of using labels and cartons printed prior to May 11, 1914, which do not state the quantity of the contents of packages of food in terms of the largest unit as Food Inspection Decision No. 154 holds that they should, providing the quantity of the contents is otherwise plainly and correctly indicated.

Orchard Fertilization

Most general farm orchards have been left in sod for many years and are in sod at present. Many are cropped in the regular rotation and the crops removed from the land. In most cases no effort has been made to feed the trees or to keep up the fertility of the soil. Apples are as much a crop as anything, then the soil should be enriched and cultivated.

Your Guarantee

that:
**YOU SAVE
\$-\$-OR
WE PAY!**

If you want best new goods for LEAST money, you cannot afford not to look into our 10,000 bargains—all offered under this \$10,000 guarantee of "better-goods-at-least-prices-or-money-back."

THE MAIL-ORDER HOUSE OF THE EAST
BUFFALO, N. Y.
Manufacturers' Outlet Co.
OUR \$10,000 GUARANTEE:
Better-goods-at-least-price-or-money-back

Oct. 1, 1915.

The Citizen's Bank,
Buffalo, N. Y.

Gentlemen:-

This authorizes your bank to pay from the deposits of the Manufacturers' Outlet Co., every cent of any customer's purchase money (as well as freight both ways) as refund in full to said customer in case he or she is not satisfied, on arrival of goods, that our merchandise is absolutely as claimed. In other words, to any amount up to \$10,000, we guarantee better-goods-at-least-price--- or money back.

MANUFACTURERS' OUTLET CO.

H. J. Schuman
Secretary

And right now, when manufacturers-without-War-contracts are so hard-hit, every American Farmer should jump at these, the greatest buying chances ever offered.

DON'T TAKE OUR WORD FOR IT

Years of fair-dealing have proved that we do what we say we will do. And, yet, we want you to rely not on our say-so—but on this guarantee in black-and-white, through a bank with deposits of over a million, an institution whose reliability is insured by both state and national governments. Rely on that! It means that you can't lose—that you are sure to save money if you try us. And, whether you are an old customer, or whether it be your first trial order, you are protected by our \$10,000 guarantee of better-goods-at-least-prices—or money-back.

Greatest Roof Bargains Yet - 59¢ a Roll

On Construction of Window Box

Points on Making One for Use Indoors

The indoor window box, properly planned and tended, will afford much pleasure and satisfaction to the housewife who misses her out-of-door garden during the winter months, says United States Department of Agriculture. It is a mistaken notion that plants when kept in living rooms use up certain elements of the air in such quantities as to make it unhealthy for individuals using the room. It is harder on plants to be in a room with people than for people to be in a room with growing plants. Plants, indeed, use air, but use such a small proportion that the effect of the plant in the room is negligible if the room is ventilated at all. This also holds good for cut flowers or plants in a sick room, although the odor of some flowers may be depressing to the patient, and bad for that reason.

A good depth for an indoor window box is about twelve inches. The bottom of the box should be covered with stones and broken pottery to give drainage and this should be covered by a layer of moss to prevent the soil above from working down through the stones. The drainage and moss should take up about three inches. The greater the body is soil above the moss, the more uniform it may be kept as to moisture. The soil should come to within an inch and a half or two inches of the top of the box.



This Bargain, like all others, is covered by our \$10,000 guarantee of better-goods-at-least-prices-or-money-back. Therefore, you are sure to get the best bargain in the country, or we lose. 50 kinds of metal roofing at prices we want you to compare. 40 different kinds of slate and rubber roofing, including the famous QUEEN CITY BRAND, GUARANTEED 10 and 15 years. Also, special single-ply at 59¢.

Lowest Fence Prices in U.S.
All the styles in our fence catalog are covered by our \$10,000 guarantee of better-goods-at-least-prices-or-money-back. Prices may go up any minute—ask us to-day.

Paint - 10% less
Bldg. Material 20% "
Plumbing - 30% "
Wall Board - 35% "

Get these paint, building material, etc., offers to-day. No matter what you are interested in for your farm or home, we guarantee to save you money—or we pay.

MAIL THIS TO-DAY

To Manufacturers' Outlet Co.
491-503 Sycamore Street
Buffalo, N. Y.:

Send me, free, the following of your Bargain catalogs, as covered by your \$10,000 guarantee of better-goods-at-least-prices-or-money-back. Place an X in square opposite catalogs you want.

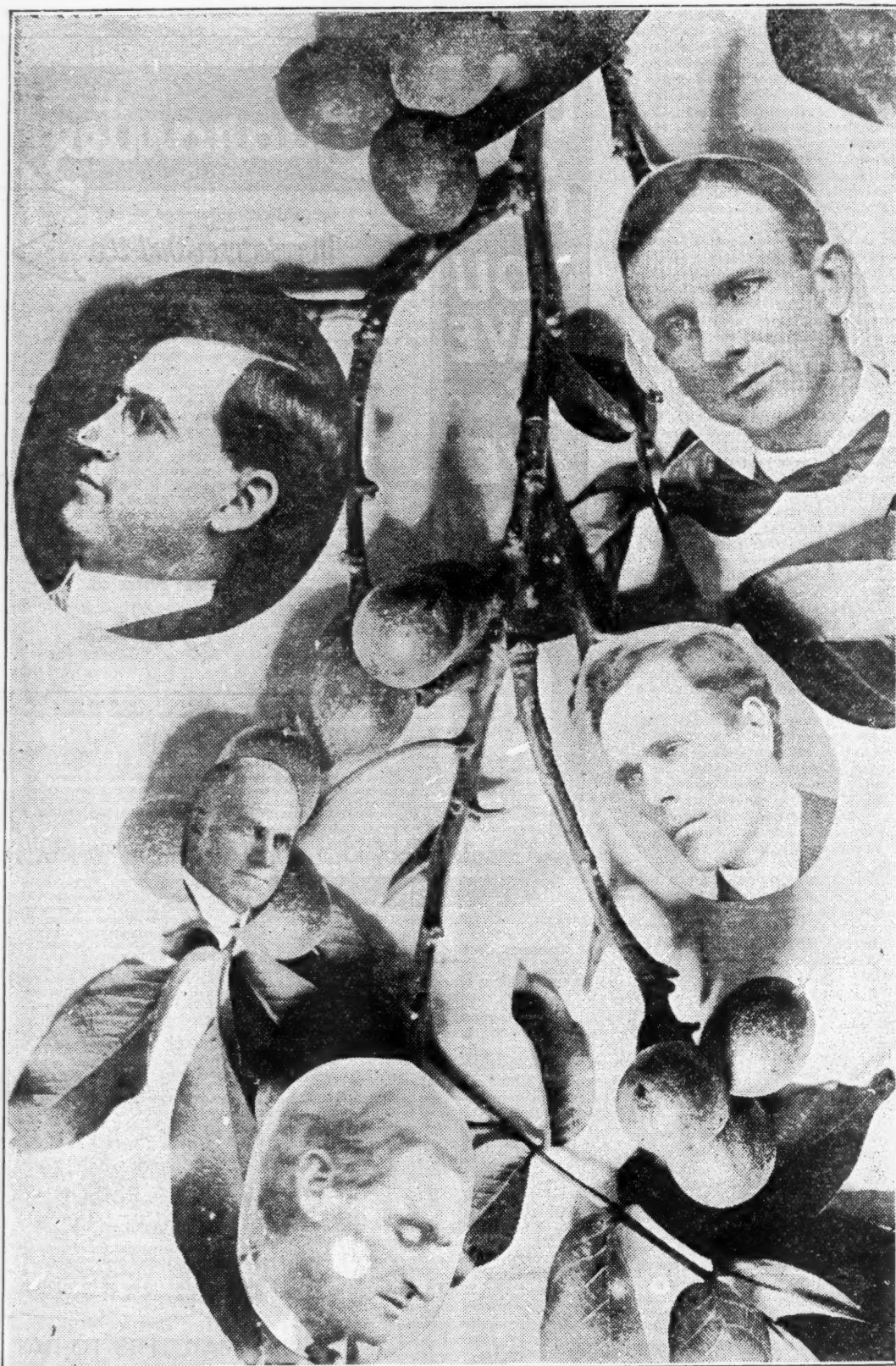
☐ Wire Fencing ☐ General Catalog
☐ Roofing ☐ Wall-Board Catalog

My name is.....

My address is.....

Nuts of Every Kind Discussed

Land in Which Other Products Fail Produce them—Have Good Food Value—Convention of Growers at Rochester, N. Y. Powers Hotel—Inspection of Rochester's Varieties.



On the left upper Twig of the Nut Branch is J. Russell Smith, President of the Northern Nut Growers' Association; Right upper twig, C. A. Reed, Washington, D. C., Nut Expert of the Department of Agriculture; Middle Left, Dr. Robert T. Morris, of New York, Famous surgeon and First President of the Association, 1911 and 1912. Dr. Morris spent a fortune in experiments with Nuts. Middle Right, W. C. Reed, Vice-President. Below, Dr. William Champion Deming, Secretary-treasurer.

Talking on the various brands of nuts in Europe and the possibilities of their being introduced in this country, Dr. J. Russell Smith of the University of Pennsylvania, president of the Northern Nut Growers' Association, spoke before that body Sept. 2nd, at its convention in Powers Hotel. In telling of the study the association has been conducting towards making

the nut an agricultural product, Dr. Smith said, that waste, steep and rocky lands may be utilized for the growing of nuts where they cannot be used for other purposes. He told of the varieties of nuts this section of the country excels in, and said that the English walnut is most common in the vicinity of Rochester. Dr. Smith concluded by saying that the chestnut is

dying of blight, and will not again be planted until a cure has been discovered. Dr. Smith's address was preceded by a talk by W. C. Deming, secretary, of Georgetown, Conn., who told of the growth of the English walnut. He said that prizes had been offered by the association for the best specimens of that and other nuts. The speaker compared the value of nuts as a

food with meat, saying that they are just as nutritious, and will, in the end, take the place of meat, which is growing more scarce daily.

In the afternoon the delegates visited the various nut farms in and around Rochester. Many varieties of the fruit were studied.

Nut Trees along Highways.

The conventions was opened yesterday morning with an address by Dr. Hugh J. Baker, dean of the New York State College of Forestry at Syracuse University. Dr. Baker spoke on "The Relation of Forest Conditions in New York to Possibilities in Nut Growing," and suggested that the Northern Nut Growers' Associations interest civic and state organizations in planting nut trees along public highways to serve the dual purpose of beauty and health.

Professor F. N. Fagen of Pennsylvania State College read a report in which he gave a survey of English Walnut trees in Pennsylvania, locating nearly 1,000 such trees in that state. Reports of many officers and committees also were heard at the morning session.

Camera Etiquette.

Unhappily the etiquette of the "kodaker" has not kept pace with the development of the kodak. It is difficult for some people to understand that there are those who have a strong prejudice against being promiscuously "snapped at" through a camera. Girls and boys, otherwise well-behaved, are particularly heedless of the feelings of others on this point. They have an idea that everything and everybody may be considered as fair game for their cameras, and that no one should interpose objections to being "snapped." And so far do they sometimes carry these fancied rights as to invite the most unfavorable criticism.

People whose work in life happens to be of a public nature suffer greatly from this abuse of the camera. The wife of an ex-president of the United States, for instance, has caused it to be frequently made known that she does not desire her children to be made the subjects of promiscuous photographs. And yet these children can scarcely ever venture beyond the confines of their home grounds without having to face some camera leveled at them. And the same is true of the children of a prominent author. Both he and his wife have publicly declared their wish that their children may be recognized as belonging to them, not to the public; yet cameras are leveled at the little ones whenever they appear. It would be discourteous enough to these parents if the pictures were taken solely for the amusement and the private possession of the thoughtless kodakers. But when the pictures are offered for sale, often for publication, the thing is unquestionably being carried a little too far.

Whenever this criticism of the kodaker is advanced it is almost invariably met with the query, "Where's the harm? What are these people so finicky about? What harm can I do them or their children by taking their pictures?" The question of the right of these parents to say whether or not their children shall be photographed does not seem to enter into the minds of the kodakers. Of course, no harm can be done by the simple taking of a picture. But that is not the question. It should be enough for any self-respecting girl or boy, woman or man, that the objection exists. The reason for such an objection concerns nobody. In plain English, it is nobody's business. The more public the work of a man becomes, the more private he generally wishes to keep his wife, his children and his home. Very often his children are about his only private possession. His wife is usually as much written about and as frequently photographed as he is. But he generally asks that his children may escape publicity. And surely this much might be accorded him.

In the camera lies a world of education. It is one of the most potent handmaids of delight ever invented, and through it the beauties of nature may be kept and happy days preserved as through no other means. It is wonderfully satisfying to see some manifestation of the work of nature, and to have the ability to preserve the impression through the lens. The camera, rightly employed, can make better people of us all. Its proper use cannot be too far extended. But it should not be abused. It must not bring discredit upon its possessor. It must not be employed in violation of private rights. The code of good breeding applies to the camera with just as much force as it does to any private right.—F. H. Sweet.

The do-
man but
view of J.
in the S
report say
has conqu
ful anima
it would
attack of

There
insects, an
remain un
feed on ne
cally all pl
ing. It is
ing thirtie
unchecked
multiply
insects. I
fact is sci
pair of gy
breed suffi
foliage in
potato-pla
multiplicat

The glu
Every day
weight in
larvae con
original we
food eaten
is equal to

Birds aie
but for the
be preserv
insect inva
English sp
pillar whic
been ruin
ibis has sa
by grasshoy

What
Gardener
may like
periments
the lavish
work.

One year
Darwin ren
of a small
mud, weigh

This he
kept it, co
months. I
removed in
plants.

Another
ried out by
ago. In a p
root, about
eleven inch
he planted
the number
naturally co

At the en
as they cam
plants! Th
plants were
ing years
"Answers."

Paint-
and repaire
lawns, neat
well arrange
a pleasant s
that the ow
joying life a
the mere pu
Life is too
making mor
when you
more useful
ones by enj
much more
beautiful ho
other place
building site
grass, flower
abundance a
cities or tow
preciate the
Most of the
neighbors do
need not hav
why be a
Somebody n
you?

Why are
farms? Bec
offering mor
Make the fa
fortable, and
return. Let
regarding th
deductions
young people

The Mighty Insect

The dominant power of the earth is not man but the insect. This at least is the view of James Buckland who in an article in the Smithsonian Institution's annual report says that, although the human race has conquered the fiercest and most powerful animals and the most deadly reptiles, it would be helpless before a combined attack of insects, says Post Express.

There are 300,000 known species of insects, and about double the number still remain unknown. These countless hordes feed on nearly all living animals and practically all plants. Their fecundity is astounding. It is calculated that one species developing thirteen generations a year would, if unchecked to the twelfth generation, multiply to ten sextillions of individual insects. It is almost incredible, but the fact is scientifically attested, that a single pair of gypsy moths would, if unchecked, breed sufficient offspring to destroy all the foliage in the United States. The American potato-plant might be wiped out by the free multiplication of one pair of potato bugs.

The gluttony of insects is insatiable. Every day a caterpillar eats twice its weight in leaves, and some flesh-eating larvae consume two hundred times their original weight in twenty-four hours. The food eaten by a silk worm in fifty-six days is equal to 86,000 times its original weight.

Birds aid man in destroying insects, and but for them orchards and forests could not be preserved from irremediable ravage by insect invasions. In New Zealand the English sparrow has eliminated the caterpillar which, together with the thistle, had been ruining the crops. In Australia the ibis has saved agriculture from destruction by grasshoppers.—P. Ex.

What was in Six Ounces of Mud

Gardeners and other botanical experts may like to know of the two following experiments which illustrate very graphically the lavish way that nature goes about her work.

One year, in the month of February, Darwin removed from three different parts of a small pond three table-spoonfuls of mud, weighing in all 6 3/4 ounces.

This he placed in a breakfast cup and kept it, covered up in his study, for six months. By the end of that time he had removed in all five hundred and thirty-seven plants.

Another interesting experiment was carried out by a Scots gentleman a few years ago. In a patch of soil taken from a hedge-root, about twenty-eight inches long by eleven inches wide and twenty-eight deep, he planted a dozen acorns, and took note of the number of plants which grew from seed naturally contained in the soil.

At the end of a year he had taken out, as they came up, one hundred and fifty-five plants! The following year fifty-six more plants were removed and in the two succeeding years two hundred and eleven!—"Answers."

Paint.—A dwelling that is kept painted and repaired and surrounded by well-kept lawns, neat, substantial fences, nice dry, well arranged walks and neat flower beds is a pleasant sight to look upon, and indicates that the owner is living for the sake of enjoying life and not working his life away for the mere purpose of hoarding a few dollars. Life is too short to be wasted in simply making money for other people to spend when you are gone. Why not make it more useful to your children and loved ones by enjoying it with them now? It is much more possible and easier to have a beautiful home on the farm than in any other place on earth. More appropriate building sites are generally available, and grass, flowers and shade trees can be had in abundance at much less expense than in the cities or towns. The farmer does not appreciate the possibilities of enjoying life. Most of them think that because their neighbors do not have beautiful homes they need not have. This is a poor excuse, and why be a follower instead of a leader? Somebody must set the pace, so why not you?

Why are the boys and girls leaving the farms? Because the cities and towns are offering more attractions than the farm. Make the farm home attractive and comfortable, and see if they don't stay or soon return. Let us hear from our friends regarding this, whether they think our deductions regarding the exodus of the young people are well founded or not.

The Apple

New York Evening Post.

Says an official of Massachusetts: "Not only do we want to boom the apple as a cooked food, but it should also be used more in its raw state." Even more commendable, because more definitely practical, was the suggestion of the Governor of Indiana that each person in the state recognize Apple Day by eating at least one apple, in accordance with the tradition that an apple each day keeps the doctor away. The trouble has always been, of course, that nobody could stop with one. As Trevisa found at the end of the fourteenth century, "Chyldren loue an apple more than golde." And there is the sad case noted only a little more than a hundred years ago by the English surgeon, Sir Everard Home, in the "Philosophical Transactions," of a child who ate so large a quantity of apple pudding that it died. It has often been observed that the apple is treacherous. The best specimen one can buy when one has left one's childhood days far behind is so inferior to the worst specimen that the boy could pick up as to make the two absolutely separate kinds of food.

One on the Dominie.



New Minister—Now just one thing more, before I accept this charge. Have you got a supply? Boulder Deacon—Well, yes, though we never said anything to the last preacher about it. I'll show you where it is and get you a key, but I tell you you'll have to be just as careful about using it as the rest of us!

Working for a Living

"You degrade your daily work if you think of it only as that which earns your living. It is something more. Whether it be farming or carpentering, doctoring or denistry, selling dry goods or carrying a hod of mortar, it is adding something to the comfort and happiness of other people, or else it is no fit work for an honest man."

Seven Sentence Sermons

Character lives in a man, reputation outside of him.—J. G. Holland.

Real happiness is cheap enough, yet how dearly we pay for its counterfeit.—Hosea Ballou.

Better have failed in the high aim Than vulgarly in the low aim succeed.—Browning.

It is a poor heart and a poorer age that cannot accept the conditions of life with some heroic readiness.—Robert Louis Stevenson.

Not in the clamor of the crowded street, Not in the shouts and plaudits of the throng, But in ourselves are triumph and defeat.—Anon.

The soul has its capital; every triumph over an unworthy impulse, every successful struggle against an ignoble weakness, every deed of good and every resistance to the bad enters as spiritual money, stocks, bonds and negotiable values into its bank of power.—Frank Crane.

Give, and it shall be given unto you; good measure, pressed down, shaken together, running over, shall they give into your bosom. For with what measure ye mete it shall be measured to you again.—Luke vi:38.

To Build Up Poor Land.

Soil low in humus and generally poor will find a great help in sweet clover. I would suggest a two-year rotation consisting of winter wheat and sweet clover for such tracts as southern Illinois, and rye and sweet clover on the poorer tracts where winter wheat farther north will not stand the cold.

A liberal application of limestone should be worked in the surface soil in the fall before seeding. At the first planting steamed bone meal may be drilled with the grain. In the spring, in February or March, seed with inoculated sweet clover seed. Wheat or rye will be out that season, and the following season cut the sweet clover when about thirty inches high for hay.

DON'T Pay Two PRICES HOOSIER Stoves Ranges FREE



To try in your own home for 30 days. Show your friends. Freight paid by us. Send it back at our expense if you do not want to keep it. You can buy the best at Actual Factory Prices. Our new improvements absolutely surpass anything ever produced. Save enough on a single stove to buy your winter's fuel. All HOOSIER STOVES Guaranteed for Years. Send postal today for large FREE Catalogue, showing large assortment to select from. No Obligations.

HOOSIER STOVE CO.
213 State St., Marion, Ind.

Apples Will Make You Independent

Many good orchards in Virginia and North Carolina are worth \$1000 an acre. You can buy good apple lands for as low as \$15 an acre. Secure a few acres and plant in apples. In a few years time you will be rich. The climate here is delightful and living conditions are ideal. Good schools and churches. Short winters. No blizzards or cyclones. Abundant rainfall—average 4 inches monthly in 1913. Write today for list of small and large farms that can be bought for \$10 an acre up on easy terms, also for our illustrated magazine, maps, etc. Prices of good lands are rapidly advancing. Write at once.

F. H. LaBaume, Agricultural and Industrial Agent, NORFOLK & WESTERN RAILWAY

Room 227, N. & W. Railway Building, ROANOKE, VA.

Heat the Whole House Through One Register At Stove Cost

HERE'S real comfort in home heating—at a sensationally low cost. Set this Kalamazoo Pipeless furnace in your cellar or basement. Cut only one hole in your living room floor for the register—and you get forced circulation of warm air to every room. Write us and learn how you can get this complete heating plant at once on

Free Trial—Cash or Credit

Costs no more than you would pay retail for a good stove—and it's about as easy to set up. No pipes except smoke pipe. Economical on fuel—saves room and work of watching several stoves—keeps all fuel and ashes in the cellar. We pay freight and ship within 24 hours. \$100.00 money-back guarantee. Mail postal today—ask for Pipeless Furnace Catalog No. 938

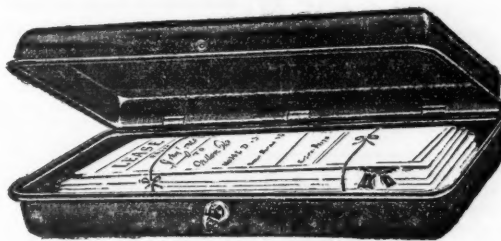
Save \$25 to \$75 on Pipe Furnace and get Heating Plans FREE Write for Furnace Catalog No. 938

Kalamazoo Stove Co.
Mfrs. Kalamazoo, Mich.
200,000 Families Using Kalamazoo Stoves, Ranges, Gas Stoves, Furnaces, Metal Kitchen Cabinets and Tables

A Kalamazoo Direct to You

You Have Valuable Papers

such as fire and life insurance policies, receipts, deeds, deposit books, wills, etc., that require a place for safe-keeping.



11 1/2 x 5 1/2 x 2 1/4 Inches

A Strong Steel Box to Keep Them In

is what you ought to have. Here is one made of pressed Bessemer Steel with the top made to fit into the grooved edge of the bottom half. It has strong hinges and a substantial lock. Two keys are furnished and each box is finished in handsome black enamel.

We Will Send You One

if you send us \$1.00 for a two year subscription (new or renewal) to Green's Fruit Grower, The Oldest Fruit Journal in America. The paper will be sent to any address you desire, and in case of renewals, the subscription will be extended two whole years from the present expiration date. Send at once to

Green's Fruit Grower Company
ROCHESTER, N. Y.

Culling the Flock

October marks the time of the fall when the summer chicks are about ready to turn onto the market and the winter flock is beginning to lay. This is the time that we ought to take some evening to go over the flock of hens that we have had during the past year and cull out the older ones and those that we know to be boarders rather than layers, or "liars" rather than "layers." I do not believe that the average farm hen ever pays for her keep after her second year. Individual exceptions do, but the common hen does not. So it is up to the poultryman, to use a slang expression, to do some culling in the fall, getting rid of the most of the two-year-old hens, replacing them by the best of the season's pullets. If we do this each fall, it means that at each culling time we will remove about half the flock, doesn't it? It will pay us to do this. It is sometimes a common opinion that the young hens do not pay until they are over a year old. If this is true, there is something the matter with the pullets. Get a new strain, add new blood to the breeding pens in the spring. The summer pullets, hatched in April and May should be ready to start laying. The pullets should be selected from the earliest hatches of the season, because those are the pullets that will begin laying before real cold weather sets in, and they will be most apt to keep it up.—Ozark Journal.

Every pullet intended for winter egg production should be matured by the middle of October in this climate. To secure this result they must be hatched before the middle of April. Young hens that have begun to lay in October and November lay rapidly and regularly all winter if properly housed and fed. Exercise is imperative; so is good food. Pure, fresh air and dry floors must not be omitted from the essential list.

CONKEY SAYS—
Don't Worry—Study poultry diseases and be ready when trouble comes. They're easy to cure. Send 4c for the new 80 page Poultry Book. Full of valuable facts. Conkey Co., Cleveland, O.

90 VAR'S All breeds Poultry, Eggs, Ferrets, Dogs, Pigeons, Hares, etc. List free. Colored Des'g 60 page book 10c. J. A. Bergey, Box J, Telford, Pa.

ELECTRIC HOME and FARM LIGHTING PLANTS
LAMP, DYNAMOS, MOTORS, Engines
Carriage, Bike, Auto, Fish, Hunting and Xmas Lights, Belts
Batteries. Catalog 3 cts. Ohio Electric Works Cleveland, O.

MAKE HENS LAY
By feeding raw bone. Its egg-producing value is four times that of grain. Eggs more fertile, chicks more vigorous, broilers earlier, fowls heavier, profits larger.

MANN'S LATEST MODEL Bone Cutter
Cuts all bone with adhering meat and gristle. Never clogs. 10 Days' Free Trial. No money in advance.
Send Today for Free Book.
F. W. Mann Co., Box 39, Milford, Mass.

FREE "Guide to Government POSITIONS"
Thousands of jobs open this year with Uncle Sam. Steady work, big pay, short hours, regular vacations, rapid advance. Write NOW for big FREE book pgs 7. It tells you how to get one.
EARL HOPKINS
Washington, D. C.

PRICES LOWER
\$26.75 \$34.39 \$77.
LOOK at these prices!
Any size engine from 1-2 to 6 h. p. stationary or mounted, at proportionate prices. Our great volume, modern design and standardized manufacture make these prices possible. Hundreds of thousands of Galloway customers testify to the quality of Galloway built and sold direct goods. Do not buy an engine, spreader or cream separator or until you know all about our new low, cut-down-to-bedrock summer prices. Manufacturing improvements have enabled us to slash the price and maintain the quality. All Galloway goods sold on a binding money-back-if-don't-like-them plan. Don't buy until you first get our new book and new low cut-and-elaborated prices for the summer. Shipped from Chicago, Waterloo, Minnesota, or K.C., Council Bluffs.
Wm. R. Galloway Company
Box 547 Waterloo, Iowa

When you write advertisers
Please mention Green's Fruit Grower.

Poultry Dept.

Poultry for Revenue Only

Written for Green's Fruit Grower by
M. BUCKLEY

Four years ago husband decided to rent out the farm fields instead of keeping a hand as we had been in the habit of doing, and as almost all farmers are compelled to do. I was delighted with the idea as it was a move that I had advocated for a long time. I was pleased, too, because husband rented the fields to a couple of young men in the neighborhood who were talking of going to town to seek employment in some factory, and we were both anxious for all country boys to stay on the farm as far as possible.

After the new farmers had put their hands to the plow I suggested to the recipient of all duns for this household that we pay more attention to the poultry than formerly, and by so doing we could keep up the table and meet all the running expenses and thus be able to put the money from the crops in the bank with the tiny nest egg we had there.

So we sold off our flock of mixed chickens and had a hundred White Leghorn hens shipped to us, thinking it would be best to commence on a moderate scale. Our poultry house was comfortable but very ordinary. We put a new poultry netting fence around the yard to keep varmints out, and decided to get along with as little

We have made arrangements with two poultry farms to ship us the Leghorn chickens as soon as they can determine the sex and in this way we are not bothered with trying to dispose of the cockerels, neither do we have to keep warmth fire in the brooder for all. The chicks are shipped in a hundred at a time and our bunch is ready for the colony house before the next one arrives. We keep the stock but one year and find that we obtain best results in that year.

We gather all jimson seed we can find and give it for winter feed and also all egg shells are saved to be pulverized for winter grit. I know many families with small flocks who have saved many boxes of egg shells by fall. We never give a mush nor mash nor sloppy food of any kind. This year's flock will have sugar beets added to their menu and that is the juiciest food they will know unless it might be a fat beetle. We buy Rhode Island Red chickens from our neighbor's pretty flocks for our table as we consider them the best table fowl raised. So long as we keep poultry for revenue we shall probably keep the breed that we have now, but we will not set any hens nor any incubator, but make the money from the eggs and dispose of the hens after they have passed their first mile stone.

Adjoining the poultry yard is a permanent blue grass pasture of a couple of acres with a stream running through. The fowls roam here and in the patch of rape which borders on another side of their yard.

Poultry Notes

All the milk they will consume is a help to the molting hens.

Feed plenty of charcoal, as it is one of the best things for keeping the poultry healthy.

Good care to-day and neglect to-morrow will never make the biddies shell out their golden nugget.

Exercise is alike beneficial to man beasts and fowls. None thrive without it.

Get your dust bath material stored under cover, if not already done. This is important.

A well cared for flock of hens will pay a bigger dividend than anything on the farm.

The poultry manure is a valuable asset. The most satisfactory way of storing it is in barrels.

Soft shelled eggs are often caused by fowls being confined, becoming overfat, and from lack of mineral matter.

Keep the hens supplied with a dust bath, and a little insect powder mixed with the dust will have its good effect.

Do not keep too many fowls in a pen. It is far better to cull down closely than to do this, for a smaller number will do much better.

A fresh egg will absorb odors as readily as fresh milk. Mustiness or mouldy growth in egg cases or fillers will taint the egg and lower its quality.

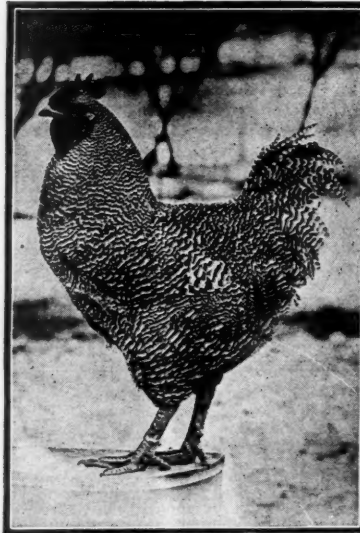
It is a mistake to sell off all the adult fowls every fall, keeping only the pullets unless you intend to buy eggs in the spring for hatching purposes. A two-year-old hen gives better eggs for hatching.

Wheat bran and alfalfa are two bone producing feeds, and one or the other should be before the laying hens, preferably both. Alfalfa is also a muscle making food.

Do not wait until the weather gets bad to build your new poultry house. Get at it now so that you may have everything ready when you are obliged to move all stock in to protect them from the rough weather. There is nothing like being ready for things and not be pushed for such necessities.

Every city consumer knows that while eggs look much alike on the outside, there may be a very noticeable difference on the inside, both in color, cooking qualities and flavor. The consumer wants an odorless egg, with a yolk of good color.

Alfalfa and clover leaves are very rich in egg-making material. The same is true of oil meal. Alfalfa is palatable, keeps bowels right, is rich in protein and mineral matter—two essentials of egg production. So it should always be before the laying hen.



Plymouth Rock Cockerel

expense as possible until we found out how our venture was going to pan out. The birds were shipped to us in February and quite a number were laying at that time.

We made arrangements with a hotel keeper in a city about twenty miles away for eggs to be shipped to him four times a week and oftener should he need them; twenty-five cents a dozen during the summer months and thirty-five cents for the remainder of the year.

Every crate bore the name of the farm, "Oak Knob Farm," in red letters and every time a crate was filled the date was stamped on it. Oh the crates and crates of pretty white eggs that we shipped to that hotel keeper! That was the start of what has grown to be a very profitable business for us. Each spring we sow a patch of millet and after cutting we cover a shed with it that we have built near the poultry house. The shed is similar to the ones we build for stock and cover with straw. The chickens love to be under the shelter during the winter days and no day weather is too cold for them to be scratching after the millet seed. They get nearly half of their living at that shed for we have added sunflowers to their bill of fare and a mammoth pile of them stands near the shelter covered with straw, and a few are thrown out for them every day. There isn't a rooster on the farm and we never feed the hens warm feed and we have four hundred of them now.

Hens Fed Beef Scraps Lay many more Eggs

That it is a poor policy for farmers not to feed some kind of food to their chickens which is high in protein value—such as beef scraps or sour milk—is the opinion of H. L. Kempster, associate professor of poultry husbandry at the University of Missouri.

Mr. Kempster has recently conducted an experiment which he believes proves conclusively that protein food produces greater results at lower costs.

In three separate pens the same number of chickens were kept. All were fed corn all of the time, wheat part of the time, and in addition ground grain rations of bran, middlings, and corn meal. Besides this regular feed for the chickens in all three pens, those in pen one were fed beef scraps, and those in pen three were given all the sour milk they wanted. The hens were about the same age. The experiment covered the time between November 1 and June 1.

Those hens in pen two—given only the regular feed—produced only 800 eggs; those in pen one—given beef scraps—produced 1518 eggs, and those in pen three—fed sour milk produced 1425 eggs. The hens in pen one ate 923 pounds of grain, those in pen two 944 pounds and those in pen three 836 pounds.

The amount of beef scraps fed to the chickens in pen one was 60 pounds, costing \$1.80. These hens produced 718 more eggs than those chickens fed only the regular ration. In other words, these chickens produced 718 additional eggs on feed which cost but \$1.80 more than the regular ration. Those hens fed sour milk produced nearly as many eggs as those fed the beef scrap ration.

Winter Poultry Work

Preparing for the winter? Make your poultry houses warm and comfortable for the winter, overhaul them, see that no cracks are there to allow cold draughts to strike on the birds or the roosts, be sure that your roofs and north, east and west sides are perfectly tight, but allow for plenty of fresh air to come in at the south side, which ought to be the farthest away from the roosting section; this will insure a dry house. Houses may be warm and comfortable and yet well ventilated; a stuffy, ill ventilated house that smells when you open the door in the morning is not a healthy place for your birds; when this is the case give more ventilation without draughts. Use plenty of charcoal. Supply a good dust bath; coal ashes or road dust is suitable for this purpose. Clean out dropping often, every day if possible. Weed out the undesirable, cockerels, pullets and old hens that you do not need to produce the best results. Only keep the useful birds, giving them all the room possible. Winter eggs bring high prices and you only can get best results by keeping the most promising layers. If you want eggs you must feed for them. Supply a good litter and plenty of it.—Fruit Grower.

Making Hens Lay

To make hens lay when the prices are the best we must have: First, warm and dry houses for them to roost in. Second, alongside each pen there must be a shed for them to occupy during bad weather. Third, give corn only at the evening meal during cold weather to impart a warmth to the body. Fourth, bury all grain among chaff, leaves or other litter or throw in scratching pens to induce exercise. Fifth, mash made from ground grain, fed scalded or dry, to which is added two or three times a week ground meat scraps, must be given every morning. Sixth, there must be a liberal supply of green food, such as cabbage. Seventh, fresh water must be given daily. Eighth, sharp grit and cracked oystershell must be constantly within reach.

There is a great deal of useless work done. If societies or business were under one proper rule, there would be large savings. Factory work, when under proper conditions, turn out work cheaper, because of more use of a sewing machine, or any kind of machine, or any model of product. All kinds of work done by day-light is a saving and interesting when done in a spirit of love, because work is love of life.

During should changes aid in pr After the to reduce the like, eat. A added to and a few good.

Mr. C preserve plants, e with? I with it a This info ceived.

Reply: from the a week, barrels. better, fo may heat After the empty th floor and as far as condition fertilizer, times it is soil, or it before dra methods more eve strength i If used to in contact troyed. I berry pla grows. It year, but May or Ju

Nitrate on all cro and should connection of growth. There i Small fru given a r attaining velopment with a th suitable m A good renders th at all time of cultivat

The need ing stock r dozen ordi four ounce supplied by hoppers. a certain alfalfa and of supplyin

Don't green food ing winter small pota alfalfa or These, who corn chop, the fowls.

Accordin Michigan i cows and talk like state could graze off he should a Pole. If a hog he cou three roots

Thomas educated m educated m familiar wh ment in wh and scienti many such name them

Water, wh is cheapest a

Care in Molting

During the molt of the old birds they should have the best of care, and some changes should be made in their feed to aid in producing the new coat of feathers. After they begin to molt, it is a good plan to reduce their ration of wheat, oats and the like, and feed largely corn, all they will eat. A small amount of linseed oil meal added to their mash will be very beneficial, and a few sunflower seeds will prove equally good.

Hen Manure

Mr. Charles A. Green:—How shall I preserve hen manure, how apply it to plants, etc? Is it good to fertilize trees with it and how and when shall I apply it? This information will be thankfully received.—Paul Hofer, N. J.

Reply: Hen manure should be removed from the poultry house often, at least once a week, and should be stored in boxes or barrels. The smaller the receptacle the better, for when stored in large boxes it may heat and the ammonia may escape. After the accumulation has taken place, empty the boxes or barrels on to a barn floor and pulverize the fertilizer with a hoe as far as possible. The fertilizer is then in condition to be applied to plants as a fertilizer, but owing to its strength sometimes it is diluted with muck or even garden soil, or it is sifted onto the manure pile just before drawing manure to the field. By these methods the hen manure is distributed more evenly. When it is applied full strength it is generally applied too freely. If used too freely, roots or plants coming in contact with it will be burned or destroyed. Hen manure is helpful to strawberry plantations or to anything that grows. It can be applied at any time of the year, but preferably in early spring, April, May or June.

Nitrate of soda can be used with benefit on all crops. It is immediately available and should therefore be only employed in connection with plants in an active stage of growth.

There is far too little mulching done. Small fruits, trees and garden crops are given a most favorable opportunity for attaining the highest perfection and development when their roots are covered with a thick mat of leaves, hay or other suitable material.

A good mulch keeps down weeds, and renders the soil loose, moist and porous at all times, and that, too, with little labor of cultivation.

Lime is Essential

The need of lime in the laying and breeding stock ration is very important. In one dozen ordinary sized eggs there are nearly four ounces of lime. This element is best supplied by giving cracked oyster shell in hoppers. Skimmilk also provides life to a certain extent in palatable form, and alfalfa and clover are satisfactory sources of supplying lime.

Green Food for Poultry

Don't forget to lay up a stock of green food for your fowls during the coming winter. Cabbage, beets, mangels, small potatoes, all are good, so also is alfalfa or clover, especially the leaves. These, when scalded, with an addition of corn chop, make an ideal winter feed for the fowls.

Cows and Hogs
Utica Press

According to one resident of that state, Michigan is a great country for raising cows and hogs. One Michigan boomer talks like this: "If all the cows of our state could be put into one cow she could graze off the equator while with her tail she could swish the icicles off the North Pole. If all our hogs were turned into one hog he could dig the Panama canal with three roots and one grunt."

Thomas A. Edison, asked to define an educated man, replied: "My idea of an educated man is one who is somewhat familiar with every branch of the environment in which we live, social, commercial and scientific. There are undoubtedly many such men in America, but I cannot name them off hand."

Water, when clear and contains no smell, is cheapest and purest to drink.

October

The poet sings of autumn as the melancholy season of the year. Nothing could be further from the truth. Not even poetic license gives a singer the right to misinterpret the most colorful and buoyant season of the year. Melancholy days forsooth! Why, October is sandal-footed and russet-garbed—a very Rosalind of the months. The glint of the ripe grape is in her shadowed eyes and the color of flame in her cheeks, says Post Express.

She is a wonderful artist, is October. There is wizardry in her brush and she mixes magical colors. She has a passion for flamboyant tones—for flaming reds and yellows, for metallic purples and greens, for gold and bronze, the most diaphanous of violets, and the loveliest of crimsons. Her handiwork is on the dogwood and the sumach, on the maple and the beech, on the pasture and the hill, on the forest and the valley, on the country road and the city street. There is color, thaumaturgic color, everywhere!

And she is a gypsy, this October, the veriest madcap of her sister months.

Shady shade trees on the lawn and all about the farm home are also essential for the adornment of the home. Hardly a home, whether in town or country, but has its trees; the owner of the home that has none should arrange to supply the deficiency as soon as possible. This he can do with little expense, for there are few localities that do not afford a treasure of trees in the forests; all that is necessary is to take the time to transplant the trees.

Transplanting is best done in fall or spring. Trees that are not much older than two years are preferable for transplanting. At this stage of life the roots have developed reasonably well and their growth is vigorous. Wounds from ill-treatment in removal will heal easily at this time. Then, also, the roots are, as yet, not extensively distributed, therefore labor and time will be saved in digging them out says Farmer's Guide.

In handling trees for transplanting one should be very careful not to cut or chip the stem or the main root near its base. If the wound is too large it may prove fatal. Before planting the lateral roots should be pruned to about two-thirds of their length, particularly those requiring a large unproportioned hole to set them in. This saves labor. Prune every root that is mangled or injured, making a nice smooth cut with a sharp knife.

Colossal Tower of Jewels

Dominating the whole scheme is the colossal Tower of Jewels, 435 feet high, set in the central court of the universe, whose Corinthian columns are taller than those of Saint Peter's at Rome. Each column is surmounted by the figure of a star, whose head dress is covered with "jewels," and from the tower itself descend 80,000 sparklets in all colors, which flash in the sun and scintillate at night when the searchlights illuminate the court.

The site and plan of the exposition have made it the most compact ever built. It occupies 635 acres, of which 50 have been devoted to horticultural display. Liberal use of palms, shrubbery, vines and trees has been made to relieve and diversify the long facades of the exhibit palaces. At the far ends of the grounds are the athletic field and race track; at the near end lies the zone, in which are grouped the amusement concessions.

Conceived to celebrate the opening of the Panama Canal, the idea of the exposition had its inception in 1904. The great fire of 1906, in which San Francisco practically was destroyed, only delayed plans for its embodiment. The authorization of the state legislature, together with an appropriation of \$5,000,000 was obtained and, in April, 1910, \$4,089,000 was raised by private subscription in two hours. President Taft signed the exposition act October 4, 1911.

An Investment of \$80,000,000.

In work done by the exposition company, the nations' states and territories participating and the concessionaries admitted, an investment of \$80,000,000 is represented. Exhibits on display probably will bring the total of capital temporarily tied up within the grounds of \$330,000,000 or more.

Only one exposition building is permanent. The city and the exposition jointly built as part of the city's new civic center, a \$2,000,000 auditorium.



The Man in the Multitude

That the human voice may be transmitted across our continent by telephone is the marvel of this age of wonders. Yet the full significance of the achievement is not realized if it is considered strictly as a coast-to-coast connection.

The Transcontinental Line not only bridges the country from east to west, but, by having finally overcome the great barrier of distance, it has removed the last limitation of telephone communication between all the people of the nation.

This means that the voice can be sent not only from New York to San Francisco, but from *anywhere* to *anywhere*—even from *any one* to *any one*—in the United States.

Wherever you are, it is possible to reach any one of our hundred million population. You can single out from this vast throng any particular individual with whom you desire to speak.

To bring this about, the Bell System has spent years and millions, extending its lines everywhere, anticipating the ultimate triumph. It has had the foresight and the courage to unite this great country, community by community, into one telephone neighborhood.

With success achieved by the Transcontinental Line, the established Bell highways make you, wherever you are, the near neighbor of your farthest-away fellow citizen.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY
AND ASSOCIATED COMPANIES

One Policy

One System

Universal Service

When you write advertisers Please mention Green's Fruit Grower

"FINE, FAT FEEDING."

Ancient Table Ways and Foods.

The heroes of Homer were not nice feeders. They seem to have had the healthy appetites of savages. They liked plain food and plenty of it. They had neither butchers nor cooks. They slaughtered their own beasts and prepared their meat as well as they could. They had little taste for fish, which they ate only when there was nothing else to be had, and they looked upon game as no better than the food of necessity. Nor were vegetables pleasing to their sturdy palates. Meat, bread and wine were their staple fare, and they asked for no accessories. Pork and mutton and goats' flesh they ate willingly. Indeed, the beast which to some is still unclean was very much to the taste of the Greeks, and was highly esteemed at their banquets unto the end. Athenaeus writes in lyrical strains of a pig that once was served to him and his friends, the half of which was carefully roasted, the other half boiled gently, as if it had been steamed, and the whole stuffed with thrushes and other birds. But best of all the Homeric heroes liked beef, cut into pieces and grilled upon spits. And it was only on occasions of sacrifice that their desires were wholly satisfied. Though the gods, to be sure, claimed the daintiest morsels, there was enough left to appease the stoutest hunger. Nor did they demand any adornment to such feasts as these save fruit.

MYERS
HAND SPRAY POWER
PUMPS
SPRAYING-PAINTING-DISINFECTING

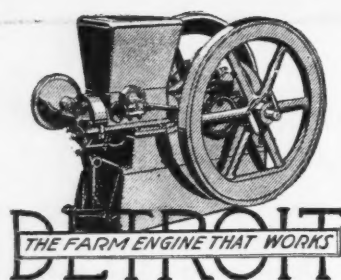
Get your orchards and trees in prime condition this Fall and they will require but little attention next Spring. For Fall spraying with a Myers Spray Pump destroys scale and similar diseases at the right time.

The MYERS POWER SPRAY RIG shown below is built for high pressure work where extensive spraying operations are carried on, and is complete with tank, tower, pump and accessories ready for engine and wagon trucks. Other types of Myers Spray Outfits include small Bucket and Knapsack Sprayers, and medium and large capacity Barrel and Tank Outfits for hand or power operation—All are proven, tested and completely equipped with Nozzles, Hose and Accessories, ready to spray.

Send today for 64 page Catalog—MYERS SPRAY PUMPS for SPRAYING, PAINTING, DISINFECTING. It shows all styles and gives Tables, Formulas and Directions How and When to Spray.

OTHER MYERS LINES—Pumps for Every Purpose, Hay Tools, Road Wagons.

F.E. MYERS & BRO
ASHLAND PUMP AND HAY TOOL WORKS
150 ORANGE ST. ASHLAND, OHIO.



Saves Fuel, Time, Labor, Money
Built and guaranteed by largest producers of farm engines—a regular glutton for work—simple, durable, powerful—four cycle, suction feed, make and break ignition—every part interchangeable—fully tested. **Guaranteed to Develop Rated Horsepower**
8 Horsepower Detroit only \$98.75
that means
\$12.35 per Horsepower
Can you beat that? Write for big illustrated Engine book to-day
Full Line Detroit Engines 1½ horsepower up
DETROIT ENGINE WORKS
191 Bellevue Ave. Detroit, Mich.

OVERLAND ALUMINUM SHOES

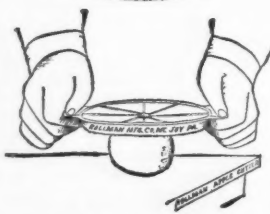
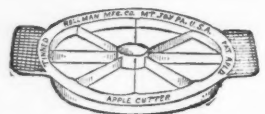
Sizes 7 to 13 **Save Money and Prevent Sickness**
Water-Proof, Rust-Proof, Rot-Proof. Warm in winter, cool in summer. Weight about the same as an all-leather work shoe. Will outwear several pairs of leather, rubber or wood soled shoes. No metal touches you. Thick felt insole. Comfortable to wear. Keep the feet in good condition. Best by test for all work in any weather. **MONEY BACK** if shoes do not meet with your approval. Write for FREE catalog which shows styles, gives prices and tells how to order. A postal brings it.
OVERLAND SHOE CO. Dept. 13 Racine, Wis.

MAKE \$60 A WEEK
New gas-generating Coal-oil lamp. Absolutely safe. Big money saver.
300 Candle Power
Light it and make a sale. Thousands can be sold. **Enormous profits on every sale. \$60 a week easy.** Low retail price. Attractive terms to agents. Write quick for territory and free trial offer.
THE L. THOMAS MFG. CO.
1170 Rome St. DAYTON, Ohio

MOLASSES BEST FEED FOR PIGS AND CALVES
New York Molasses Co., Dept. GF, 30 Church St., N.Y. City

Rollman Apple Cutter

Tinned



The way to use it



Will gracefully slice the apple and dig out the core at the same time. Cuts the apple into eighths.
A simple, durable, useful tool for general household use. Especially adapted to preparing apples for baking. Will cut potatoes for French fries.

How to Get One

Send us a one year subscription (new or renewal) to Green's Fruit Grower, with 50c to pay for same, and we will send you one of these handy apple cutters postpaid, free of charge, to pay you for your effort. Send now and be glad later.

Green's Fruit Grower Company
ROCHESTER, N. Y.

Health Department

"Your health is worth more than it can possibly cost you."
—Samuel Johnson.

The Doctor says of Apples

"The manifold blessings of the apple have been often set forth. It is good for the physical man in many ways. It is an aperient, keeping the internal organs in good working order; it is a prophylactic or preventor of disease, owing to the medicinal value of its juice; it is soothing in fever, a foil to headache, a general regulator and dietetic. Easily digested itself, it aids in digesting other foods. Nobody ever got sick from eating ripe apples. They cure, but never cause indigestion. As an antidote to alcoholism they have been proved a sovereign remedy. A regular apple eater will never contract the liquor habit. There is a mutual aversion between the apple and John Barleycorn. They cannot live in the same house together, will not occupy the same bed, and can't agree in the digestive organs. Drink liquor and you hate apples. Eat apples and you hate liquor. It follows therefore that the cultivation of a taste for apples is a sure preventative of contracting the liquor habit.

"My own opinion, as a practitioner of medicine and surgery for over a quarter of a century, is that the use of much less meat and much more fruit by our citizens would certainly result in less illness and add much to length of life and happiness to the people. Also that modern medicine, surgery and apples are most potent agents in increasing longevity and reducing the high cost of living."

To Reduce Flesh.—People troubled with superfluous flesh should diet on absolutely raw foods, consisting mainly of fruits, nuts, grain, milk, and when fresh meat is desired, a hamburger steak may be partaken of; to this may be added raw oysters and clams. Every kind of fruit except apples is allowed; also melons, salads and vegetables. A small quantity of freshly cracked grain, about a tablespoonful at a meal, is very strengthening and very delicious after one becomes accustomed to it.
All heating substances, such as fats, starches and alcoholic drinks, are fattening; for that reason many advocate the complete elimination of heat. Cold baths instead of hot are advised.

One of the chief causes of ill health is the ceaseless thinking and talking of it. Take a daily bath the temperature of the body; do not use the cold plunge without a physician's advice.

Catching cold may often be more truthfully called catching heat, as colds are caught in stuffy, close rooms. Pure air makes pure blood.

A cold bath, followed by a vigorous rubbing with a coarse towel is excellent for the woman who wants to be slender. A cup of water taken before breakfast is also beneficial.

The fat-producing foods are principally milk, cream, eggs, butter, olive oil, the sweets—sugar, honey, sweet desserts, jams, sweet fruits; the starchy vegetables—potatoes, peas, beans, corn, beets, wheat bread rye, cereals of all kinds, rice, sago, etc. Of the fruits, peaches, grapes, bananas, prunes and figs are especially recommended. The only foods cut out of a thin person's diet are the condiments—pickles, pepper, mustard, curry, salt, etc.; the acids, including acid fruits, the vinegar in salad dressing etc.; and the stimulants, tea and coffee.

Fruits

It is a mistaken idea that no fruit should be eaten at breakfast. It would be better if people would eat less bacon and grease at breakfast and more fruit. In the morning there is an acrid state of the secretions, and nothing is so well calculated to correct this as cooling, sub-acid fruits, such as peaches, apples and pears. Most of us have been taught that eating fruit before breakfast is highly injurious. How the

idea originated I do not know, but it is contrary to both reason and facts.

The apple is one of the best of fruits. Baked or stewed apples will generally agree with the most delicate stomach, and are an excellent medicine in many kinds of sickness. Green or half-ripe apples stewed and sweetened are pleasant to the taste, cooling, nourishing and laxative, far superior, in many cases, to the abominable doses of salts and oil usually given in fever and other diseases.

Oranges are very acceptable in most stomachs, having all the advantages of the acid alluded to, but the orange juice alone should be taken, rejecting the pulp.

The same may be said of lemons, pomegranates, and all that class. Lemonade is the very drink in fevers, and when thickened with sugar is better than syrup of squills and other nauseous drugs in many cases of cough.

Tomatoes act on the liver and bowels, and are much more pleasant and safe than blue mass or liver regulators. The juice alone should be used, rejecting the skin.

The small seeded fruits such as blackberries, figs, raspberries, currants and strawberries may be classed among the best foods and medicines. The sugar in them is nutritious, the acid is cooling and purifying, and the seeds are laxative.

Take Exercise.

A pamphlet of warning, entitled "Exercise and Health," has just been issued by the United States Public Health Service. The bulletin calls attention to the significant fact that, in spite of more sanitary modes of living and better protection against communicable diseases, the death-rate after 40 years of age is on the increase. Investigation has revealed the fact that this shortening of life is caused in large part by diseases of degeneration. That is, the arteries, the muscles, the heart, the kidneys and other organs degenerate as a result of indolence and sedentary occupations. The obvious remedy is exercise, and the pamphlet says on this point:

Take exercise. Take daily exercise. Have a hobby that takes you out of doors. Walk to your business, to your dressmaker's, walk for the sake of walking. Join a walking club and keep your weekly score of miles. Keep chickens, make a garden, wheel the baby, or play golf or any other game, but take two hours out doors exercise every day. Gymnasium work is good for those who like it and can afford it, but avoid heavy athletics. Don't try to be a strong man. The champion athlete often dies young. Be a moderate, persistent daily exponent of exercise. You may not burn the family carriage, as Benjamin Franklin suggested, but, at least, as he advised, walk, walk, walk!



Cheaper

"I thought your father wasn't going to send you back to college?"

"That's so. Dad did kick on the expense, but I threatened to stay at home and help run the business, and then he decided that a college course would be a lot cheaper."—Cleveland Plain dealer.

COUNTRY TOWN SAYINGS

By Ed. Howe

You get tired if you have nothing to do.

I have noticed that a man who tells good stories does not care to listen to them.

When men go hunting, about all they find to shoot at are signs reading: "No hunting allowed on these premises."

This is a funny world, and it is a little funnier than usual this year.

Some beaten paths are too long; cut-offs are possible.

When a man has a clever wife, ever notice he shoots at are signs reading: "No get rid of the responsibility."

The patience of a fifteen year old girl is often sorely tried by her mother.

Old people are not as selfish as young people, because they are never so hungry.

When a woman urges a guest to stay longer, she never means more than half of it.

When a free horse comes along, how people climb on! And don't you feel a little like climbing on yourself?

Women look as tough when riding a bicycle as they do when voting.

The most forlorn looking object in the world is a man guest around the house in the day time.

College graduates hit and miss as do men who never attended college.

A good deal may always be said on the other side.

Nearly every man has the fool habit of sitting in the shade, and wishing things, and believing he is earnestly striving for them.

Anyone who will keep quiet can get the reputation of having good manners.

Newest Notes of Science

So-called Chinese glue is made by diammonia.

Seventy lives are lost annually in the United States through forest fires.

The first electric railroad in the canal zone is being built from Panama City to La Boca.

What is said to be the largest clock in the world forms a part of an electric sign in Boston.

Tokyo at the end of last year claimed a population of 2,099,181, a gain of more than 102,000 in a year.

An Illinois inventor has patented a box that unfolds and displays each piece of candy it contains.

The German standard of light measurement is nine tenths that of the international candlepower.

In Arabia there is a tract of unexplored territory nearly five times the area of Great Britain, while nearly a quarter of Australia awaits the investigation of a civilized man.

By an ingenious machine a California rancher slices potatoes that are unsalable.

Forests of Rock

"The area within which the fossil forests are now found was apparently in the beginning of an irregular but relatively flat basin, on the floor of which after a time there grew the first forest. Then there came from some of the volcanoes, probably those to the north, an outpouring of ashes, mud flows, and other material which entirely buried the forest, but so gradually that the trees were simply submerged by the incoming material, few of them being prostrated. On the raised floor of the basin, after a time, the next forest came into existence, only to be in turn engulfed as the first had been, and so on through the period represented by the 2,000 feet or more of similar beds. The series of entombed forests affords a means of making at least a rough estimate of the time required for the upbuilding of what is now Specimen Ridge and its extensions."

When sha

Green's opinion of crop of ei Buckwheat 20th in 4 trees for f as late as nearly lev we would top of str My idea is the straw dirt on to 5 or 6 in trees. Als with harro in the spri on top to I will need l I know men, and and would What I 5-inch loos turned, too just as effe ground?—

Reply: orchard by in Novemb the orchard November growth ha myself in that the co all winter spring at cultivation in land lyin and there i by having by the cov spring.

Mr. Cha water from was dug te until a few and put a the same. dry weathe again. Do do with it? I also ha are full of been there change the many and work. Is or get rid o

Reply: importance that of a for the fam other anim which ther of impurity new well in slant of the or objection If the slan barnyard to ity of dange to the well. rural hotels is at the pre cases objec drain at all stream, the brook, cree cesspools a desirable an ited by law farm is so carefully l resident wi health of hi Dig over out the wo all the soil a throw the so

What Green's F 1500 bush

Letters From The People

"Prudent questioning is the
half of knowledge."—Proverb

When shall Cover Crop be Plowed under

Green's Fruit Grower:—Would like your opinion of plowing under a heavy cover crop of either Soy Bean, Rye, Wheat, or Buckwheat and Clover, to sow about July 20th in 4 year Apple Orchard with Peach trees for fillers, and plow under in Nov. or as late as the ground can be plowed, for nearly level or terraced orchard. I know we would lose some Nitrogen from soil on top of straw, in case of little or no snow. My idea is that we get a better mulch with the straw turned under and 3 or 4 inches of dirt on top, which forms a loose mulch of 5 or 6 inches to protect the roots of the trees. Also we are able to work the land with harrow from one to two weeks earlier in the spring, and form the fine dust mulch on top to hold the spring moisture, that we will need later on.

I know my idea is contrary to most fruit men, and have been told that I was wrong and would ruin my orchard.

What I want to be shown is, why a 5-inch loose dirt and straw mulch, properly turned, too late to start tree growth, is not just as effective as the straw on top of the ground?—Edward C. Howland, Conn.

Reply: You will do no injury to your orchard by plowing under the cover crop in November. I do not advise cultivating the orchard later than July, but plowing in November is not cultivation because plant growth has stopped at that date, but for myself in my own orchard I would prefer that the cover crop remain on the surface all winter to be plowed under in early spring at the usual date when spring cultivation occurs. There is always waste in land lying bare during the winter months, and there is always something to be gained by having the soil covered as it would be by the cover crop if not plowed under until spring.

Impure Water

Mr. Charles A. Green:—I have a well the water from which is not fit to drink. It was dug ten years ago and has been good until a few weeks ago. I had it cleaned out and put a peck of salt in it and still it is the same. We have had four months of dry weather and now it has begun to rain again. Do you think that has anything to do with it?

I also have a number of hotbeds and they are full of grub worms. The hotbeds have been there for years and I do not want to change their place because there are so many and it would make too much extra work. Is there any way to destroy them or get rid of them?—Geo. Lehman, Ill.

Reply: There is no question of greater importance on the farm or elsewhere than that of a supply of pure water not only for the family but for the cows, horses and other animals. Do not use water about which there is any question or suspicion of impurity. I advise you to put down a new well in a different locality where the slant of the land is not from the barnyard or objectionable buildings or outhouses. If the slant or lie of the land is from the barnyard to the well there is always liability of danger of drainage from the barnyard to the well. The drainage of farm dwellings, rural hotels and everything of this character is at the present time imperfect and in most cases objectionable. If these buildings drain at all they must drain towards some stream, thus the water of almost every brook, creek, river or lake is imperiled. If cesspools are provided they are far from desirable and in many instances are prohibited by law. The purity of water on the farm is something that should be most carefully looked after by every rural resident who prizes or appreciates the health of himself and his household.

Dig over the soil in hotbeds and pick out the worms. If necessary throw out all the soil and after the worms are destroyed throw the soil back.

What to do with Apple Crop

Green's Fruit Grower:—We have about 1500 bushels of winter apples, mostly

Northern Spy, which are ready for picking.

The parties who are to take these apples wish us to hold them for about three weeks.

We have no storage cellar and would appreciate your advice as to the best way to take care of these apples.

Would you advise that we pick them at once, barreling them as fast as picked and then store them in our barn; leave them on the trees as long as possible and then proceed as above, or pick them at once, pile them on the ground in the orchard, cover them with straw and hold as long as possible before barreling?

Is there more danger of apples "sweating" when they are barreled as fast as picked than when they are piled on the ground for a few days before barreling?—McMullen and Patterson, Pa.

C. A. Green's Reply: If your apples are fairly well colored I advise that you pick them at once, sort them as fast as picked and place in barrels, storing the barrels in the coolest place you have on your farm.

Take extra pains in sorting these apples, placing no inferior or undersized apples in the barrels.

I believe that carefully graded apples put in cold storage this fall will be a profitable proceeding, but I cannot believe that it ever pays to put into cold storage any but the first class apples. By this I do not mean fancy apples.

Advice About Return to Farm

I am a city man, was country raised up to sixteen years of age, then went to the city. I am now a man of family, have one boy 17 another 14 and one 9 years of age. My wife and I now desire to spend the balance of our lives on a farm and try to train our boys to prefer farm life. We have however but \$1,000 capital and we do not know which way to turn or what to do. Can you tell us of any section of New York State where we could get a 40 or 50 acre farm with horses and implements included for a payment down of \$800 or so? Do you know of a farm having a few acres of fruit that could be leased for a period of years with the further privilege of purchase later on?

In this vicinity land values are boomed away out of sight and there is nothing to be got here.

If you could suggest something along these lines we would appreciate it greatly and would later try to repay your trouble in a more substantial manner.—Geo. M. Otto, N. J.

C. A. Green's Reply:—Your chances of success on a farm are better for your having lived on a farm up to the age of sixteen years. It will be necessary for you to manage well with so small a capital as \$1,000. Your boys will be of great assistance to you and will take the place of capital to a certain extent, provided they are interested and are willing to work with you.

The question now is how and where to find a suitable and desirable farm. You should take time to look for land. Be sure that there are buildings on the land, and you can buy them much cheaper than you can build. A man who buys a farm in a hurry makes a mistake. Better wait a year looking for a farm than to hasten too rapidly. Many people are deceived and cheated in buying farms, not being judges of soil or location, or not knowing how much land is worth or how much they should pay for a small farm. If I could be at your side and could see the farms you were looking at, I could be of great assistance, but since I cannot be with you, the most I can suggest is given above.

It is seldom that you can buy a small farm with horses and implements included on so small a payment as \$800. By waiting or taking time before buying you have an opportunity to lay up more capital, which is greatly to be desired.

Unfruitful Nut Trees

Green's Fruit Grower Co.:—We have a large Chestnut tree in front of house which blossoms and forms fruit every year, but during the five years we have lived here, there has been less than one pint of perfect nuts. Can you suggest any remedy or what to do to induce better fruit?—G. W. Gatchell, Mass.

Reply: It is possible that your chestnut tree has not perfect blossoms and that you

should plant another chestnut tree near it to fertilize its blossoms. Among hundreds of trees I have had one that was barren similar to yours.

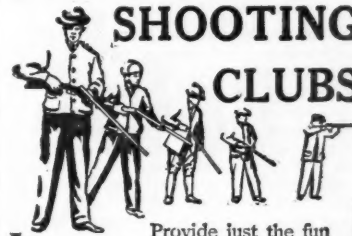
Painting Fruit Trees

Mr. C. A. Green:—I have read your account in a recent number of Green's Fruit Grower concerning the painting of fruit trees. Now I made this mistake,—if it is really a mistake. Last spring I planted 200 apple trees of the leading varieties; one hundred were 4 years old; 100 were one year old. Last fall I painted them up to the limbs with a medium thick, solution of pure linseed oil and pure white lead. These trees went through the winter O. K. so far. Needless to say the rabbits did not touch them. Now this is causing me some worry. What would you advise me to do with them? I saw an account in some fruit paper or farm paper last fall where this was a good thing to do, never thinking that it might ruin my trees.—R. S. Bradt, Ill.

Reply: My advice has ever been not to apply paints, tar, grease or anything of that kind to the bodies of fruit or ornamental trees, for the reason that you never know positively what the ingredients are of any mixture. There can be no harm in applying a heavy coat of whitewash to the trunks of fruit trees and there may be some benefit, but further than this I should hesitate about advising any kind of paint or similar material, except where stub is covered after a limb is cut off.

There is nothing you can do now to your trees to counteract the effects of the paint. If the paint is composed of pure linseed oil and lead it is not likely that they will be injured. If they are injured, please report so that I can caution others about painting their trees.

FARMERS SHOOTING CLUBS



Provide just the fun the farmer needs. Be sociable. Invite the neighbors to a trapshoot in the meadow. Find out who is the best shot. Meet once a week in winter—once a month in summer, and soon all will be good shots.

DU PONT

HAND TRAP

throws clay targets 40 to 75 yards just like flying ducks or quail.

Great practice for hunters. Fun for everybody. Let the women try. They ought to know how.

The Hand Trap costs only \$4.00 at your dealers, or sent prepaid by us. Write for free Hand Trap Booklet No. S 472, also "The Sport Alluring" (men) and "Diana of the Traps" (women).

DU PONT POWDER CO.

Established 1802 Wilmington, Del.

PATENTS — 64 page Book FREE
Highest References.
W. T. FITZGERALD & CO., 801 F St., Washington, D. C.

Your Limestone Ledge Is A Gold Mine!

(19)

Your limestone ledge, when pulverized, is worth from \$2 to \$3 per ton. The smallest Jeffrey LIMEPULVER will pulverize 1 ton an hour with 10 horsepower. The larger sizes will pulverize 3 tons or more per hour. The output from a day's work being worth from \$20 to \$90 depending upon the size of your LIMEPULVER and the horsepower of your engine.

The Jeffrey LIMEPULVER

You can feed this machine big rock weighing 60 pounds or more and out pours the limestone finely ground—only one handling of the rock—one machine—one operation. If crushed rock is wanted for road or concrete work, simply push a lever. Crumbles to any size. The patented Jeffrey Swing Hammer pulverize rock without grinding. Lasts a lifetime. Sold on a guarantee. Write for catalog and our Trial Offer.
THE JEFFREY MFG. CO.
273 First Ave., Columbus, O.



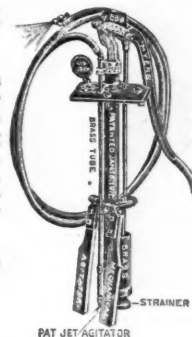
When you write advertisers Please mention Green's Fruit Grower.

Green's Cog Gear Barrel Spray Pump No. 18

For small orchards.—The Best pump on earth for the price.

It has bronze ball valves and brass seats; the plunger is brass fitted with hemp packing. Will handle hot, cold or any caustic mixture. The cylinder and discharge pipe are all brass. The air chamber is 32 inches in length, enabling the pump to throw a uniform, constant and elastic spray. It has good leverage, is very powerful and easily operated. The Mechanical Agitator stirs the solution from the bottom, making it impossible for this pump to clog under any circumstances. This pump can be used on any barrel.

Price as illustrated, included mechanical agitator, 15 ft. hose and nozzle, ready for use **\$8.80**



The Handy Portable Sprayer

Is made for general use as a handy outfit about the garden, poultry house, stable and small orchard.

Tank made of heavy galvanized iron reinforced at top and bottom by steel bands, capacity 12½ gallons. Wheels and handles are made of wrought steel and braced, wheel 16 inches in diameter. Pump is practically the same as No. 18, described above, and is attached to tank by a clamp and held in place by a thumb screw.

Price complete including mechanical agitator, 15 ft. hose and nozzle, 2-4 ft. extension pipes... **\$14.98**

We can furnish above outfit with two wheels in place of one at same price.

Send at once for circular describing all kinds of sprayers. Do not delay.

Address GREEN'S NURSERY CO.

Service Dept. ROCHESTER, N. Y.



Fruit Notes from Field and Farm

One of the best apple growers of Delta county sends the following advice: "Let apples remain on the trees just about as long as they will hang there without becoming mellow. When an apple ceases to grow it takes on a better quality. It has been proved that such an apple will keep longer than one packed before it matures and this is what we want. We have been making two pickings on the trees as a general thing and sometimes as many as three pickings. It will pay to pick over the apple trees twice, because we can always go in the orchard and find some apples riper than others. Some varieties ripen unevenly. It will pay to pick only the ripe apples and leave the green ones on the trees and let them grow ten days or two weeks, or even three weeks. We find some apples ripen sooner than others on the same tree. We go over them and pick of the ripest and largest and leave all the little green ones on the tree. Then when we come to pick them we find them there almost as good as at the first picking. It is the same way with peaches. With summer apples it is just the same way. I know several people who began this practice and they will not any more think of picking all the apples at one time than the peach growers think of plucking all their fruit at one time."

The basis of a good fruit exhibit necessarily depends upon the cultural conditions which produce fine fruit. Then it depends on the exhibitors' ability to select his best fruit and a good deal of skill with artistic judgment is required on this point. Do not wait until the crop is picked to select show specimens. The successful exhibitor makes his collection in the orchard while the fruit is still on the tree. By viewing the fruit as it hangs naturally and by carefully surveying the different trees in the orchard.

The late H. E. Van Deman, who was always in demand as a fruit judge, had the time of his life in picking the box and carlot winners up in the northwest where every grower's exhibit was about perfect. He hit upon one idea in his scoring. Every fault that appeared in the lower tiers that was not in the upper one was noted and the penalty doubled for trying to hide it. The effect at deception was rewarded with the just condemnation that it deserved. And this should be an established rule in all competitive fruit shows henceforward. The judges should insist on honesty in the fruit package. The conscience should be packed

in with the fruit. This will help to sell the next package if it does not the first one. In judging the car loads and other large exhibits it was not possible to really examine and score but a small part of the apples shown. Boxes were selected at random, but characteristic of the whole from any part of each exhibit. After the exterior had been critically examined the top and interior layers were placed separately on a table that full knowledge might be gained of the whole contents and of the package as well. Ten boxes from one carload of 600 were considered enough and one or more from the smaller lots. Even this required days of time. The competition was so close that the judges were obliged to score upon a percentage of 1,000 instead of 100 as the score card reads. Even then the results were exceedingly close in many cases. By using the utmost care and

owners, acting upon the theory that the fires were caused by smut tried to prevent the disaster by the introduction of live steam into the separator. An outfit was constructed and attached to a number of machines for carrying steam from the engine to the separator and distributing it throughout the separator for this purpose. This method of combating the fires was adopted on the theory that the smut-air mixture could be made much less explosive by the addition of moisture, as when steam condenses it always forms drops on any dust particles which may be near.

Can vinegar be made from apple peeling and cores? I have a recipe for sweet apple cider; can I use the same for vinegar? G. E. M., Canon City, Colorado.

Answer.—You can make good vinegar out of apple parings and cores. A stone crock or jar is a convenient vessel to use. Place in it the parings and cores and add one cup of molasses. Fill the jar almost full of warm water; tie a piece of muslin over the top and let stand until well fer-

sack impervious to light before it is time for it to color, and it will have no signs of red on it when it ripens.

Usually the trees in the cultivated orchard continue their growth longer, consequently the fruit does not ripen as early in the uncultivated orchard and therefore, they do not get so much sunlight.

Blowers blackberry in comparison with Eldorado.—At present we are unprepared to pass an opinion, not having had the plants growing under our observation. Next year we will be likely to test them as the plants are now being grown on our Arlington Experiment Farm.

It is a pleasure to aid you in your work; do not hesitate to call on us when we can help you; and when you are in the city, come to see us. You will find my office at 220 Fourteenth St. S. W., Fourth Floor Front.

With the compliments of the season, I am, G. B. Brackett, Pomologist, Washington, D. C.

P. S. The most approved method of handling pears, is to handle carefully in picking so as to avoid bruising or puncturing; place them in a cool room or cellar well ventilated, in shallow bins or on shelves. Under such conditions fall or winter varieties ripen gradually without rotting. They should be gone over frequently to remove them at just the proper condition of ripeness.

This is the last contribution to Green's Fruit Grower of the late Col. G. B. Brackett, U. S. pomologist. Col. Brackett was ever ready to respond to requests made to him by Green's Fruit Grower for information. We shall hear from him no more. Col. Brackett died suddenly at Washington from a severe attack of pneumonia. His death is lamented by many friends scattered all over this continent.

The Peach Orchard

With particular reference to peach orchards there is comparatively little difference of opinion among the orchardists in regard to tillage. While an occasional instance of a peach orchard which has been successful for a long time without tillage may be cited, the conviction of the best growers in practically all peach-growing sections is that thorough tillage is essential to the continued successful maintenance of an orchard.

Generally speaking, a peach orchard should be tilled throughout its entire life, beginning with the first season after the trees are planted. If, for the sake of economy or for other reasons, it is impracticable to work the entire area between the trees, it is usually feasible to confine the tillage for the year first or two to a relatively narrow strip along each row. But the width of the tilled strip should be extended each season and by the third year the entire surface should receive attention. By that time in the life of a peach tree the roots are extending beyond the spread of the branches and the entire space between the rows, where the trees have been planted the usual distances apart, is rapidly becoming filled with small rootlets and root hairs through which moisture and plant food in solution are taken up. The root development of a peach tree growing in Virginia was studied by the Department of Agriculture, and the spread of the roots was traced 36 feet, 17 feet on one side and 19 feet on the other.

No arbitrary rules for filling an orchard can be given. But if a grower keeps in mind the objects of tillage and understands the principles involved there should be little difficulty in deciding upon a rational plan of procedure.

"Thorough tillage" does not mean the same to every grower. To one it may consist of plowing the orchard in the spring and harrowing it once or twice later in the season; to another, who has a very high estimate of tillage as a means of preventing the evaporation of moisture from the soil, it may mean going over the orchard with some tillage implement 20 or 25 times during a dry season.

In general, the orchard should be gone over with some kind of a tillage implement often enough to keep the soil thoroughly light and loose, or, in other words, in the condition of a dust mulch, for a depth of at least 3 or 4 inches, says Indiana Farmer.

Tobacco is used by persons who at times feel too strong; it weakens their general health; useful occupation and patience is best.



Apple Day at Rochester, N. Y.

The above illustration re-engraved from the Rochester Democrat & Chronicle, tells its own story of the attractiveness of apples and their products. Rochester being in the center of the greatest apple growing section of the world, the Rochester daily papers give prominence to the subject as do the publications of various states where Apple Day will be more widely celebrated this year than ever before. October 19th is the date this year.

skill and not insisting on any great secrecy in the judging they were able to come to just decisions and at the same time almost entirely avoid dissatisfaction on the part of the exhibitors. We will have no big apple shows anywhere this year for the expert judges to muss over. Professor Van Deman was always fair in all his decisions and no one ever accused him of incompetency in placing the ribbons. There have been other eastern judges however coming out to this country who will never be invited again. They had such crude ideas and showed such lack of knowledge regarding our fruit that their judging was bitterly ridiculed by everybody. Our fruit grows differently and takes on such abnormal size and color that folks do not recognize it.

Fires During Threshing.

Throughout the west numerous fires or explosions have occurred to the threshing separator. They seem to originate at or just back of the cylinder. Within two or three seconds the entire separator is a mass of flames and results in the destruction of the machine, oftentimes spreading to the grain and consuming it. Several machine

MEN WANTED To sell Fruit Trees, Berry Plants, Nursery Stock, Seeds, part or full time. Clean, profitable business, all the year. **HARRY D. SQUIRES,** Remsenburg, N. Y.

FARMS Select from 2000 just what you want. All kinds. All locations. Write your requirements and receive full particulars. Bargains. Must be sold. Ayres Bldg., 2108 Gas Bldg. Chicago

\$1,000,000 WINNER! 1,000,000 sold and sale just started. Agents coming money—Walters \$50, first day, O'Connell \$40. Everybody wants new, scientific shoe scraper on doorstep. Works like magic. Automatically removes mud, snow, ice, dirt from shoes. Can't close. Saves druggery, carpets, shoes, invents new wonder. 7 patterns, 10 blades, 10 dirt outlets, adjustable brushes on compound springs. Write quick for territory, catalog—great \$1,000 offer—ALL FREE! **Security Mfg. Co., Dept. 177 Toledo, O.**

Tree Protectors Made of Wood Veneer Protect your trees from mice and rabbits. Price \$1.00 per 100; \$4.50 per 500; \$8.00 per 1000. **Green's Nursery Co.** Service Dept. Rochester, N. Y.

Learn the new profession Tree Surgery Not overworked and offers splendid and unusual opportunities to honorable young men. Ages 20 to 28. Students must have attended high school, be at least 5 foot 7 inches tall, physically sound and of good character. After completing two years' course, good men make large annual incomes. Positions guaranteed to good men after graduation. Every city, park, orchard and private estate needs an Expert Tree Surgeon. Positions open also with established companies or State and National Governments. Special attention to Fruit Growing. Tuition moderate, including first year's board. We pay salary second year. Write promptly for full particulars. Address the Secretary, **Davey Institute of Tree Surgery,** Box 45 Kent, Ohio

Paragraphs of Interest

By John C. Heber

Animals must be properly distributed in all parts of the world, and fruits and other things which they eat, and wild ones must be caught, not killed. In time the degenerated ones will breed less or none by power of suggestion, and some will perhaps come back to human form again.

There are perhaps thousands of kinds of fruit which are laid away like so many of our songs which are so instructive to read, because of former destruction, no doubt from wars and other carelessness.

There are many kinds of fruits in different parts of the world of which some people know nothing. Their seeds should be distributed in all good and warm climates and planted.

State or national governments should plant fruit trees and vines, and do all kinds of farming under civil service employment, instead of so many common trees that do not bear fruits.

Bible history teaches that certain persons offered gifts of cattle, which I understand to have meant they were small figures made of solid gold, and given as an offering.

We would have no winter season if there were no killing of any kind. Animals are, no doubt, just as sensitive as we are, only human in another form. Killing done by much degenerated animals is perhaps without intent. Animals are even more interesting than machines, for they are to us noble inspiration, not only amusement.

There are no doubt some animals that have degenerated by being treated improperly. For instance the cow; we take away its milk, overfeed it, and kill some of its young. The fowl by taking its eggs; they are not for our use. They are held in prison and ill-treated in a great many instances, and have no doubt degenerated from much larger and prettier birds.

The Gift of Love

People think that there are conditions excluding the necessity of love in their intercourse with men, but such conditions do not exist. Things may be treated without love; one may chop wood, make bricks, forge iron without love, but one can no more deal with people without love than one can handle bees without care. The nature of bees is such that if you handle them carelessly you will harm them as well as yourself. It is the same with people. And it cannot be different because mutual love is the basic law of human life."—Tolstoi

The Useful Toad.

If you have a toad as a regular resident in your garden you are in luck. It has been found out by the department of agriculture that a good, able-bodied toad eats \$19.44 worth of worms and insects every summer—the sort that hurt the farmer's crops and gardens, and spoil the lawns of towns and villages. About the best present you could make a farmer would be several toads.

Toads are home-loving creatures, in fact I have observed that most animals are attached to the place where they were born. They have the homing instinct, something as the carrier pigeon has. In many countries toads are purchased at a price which pays for gathering them. The buyer places them in his garden, which they make their home often during an entire lifetime.

The question is sometimes asked what is the relation between the frog and the toad. The relationship is so close that it is difficult for scientists to decide whether some species are frogs or toads. The frog eggs hatch into a tadpole or polliwog, which is entirely unlike a frog in its first stages, but after a time legs appear on this polliwog, and finally he emerges into a frog.

Toads are extremely tenacious of life and can exist a long time without food, and it has been reported that they can exist for centuries without food and air, but it has been proved by experiment that no toad can live for two years if deprived of food and air.

Sum Sayings

By Unkel Dudley

Fightin is the most unprofitabul biznes thar iz on this urther, speshully for nashuns. If only the rulers ov nashuns hed tu do the fightin thar wud be fuer wars an les bludshed.

Sed Senetur Brown tu Senetur Jones: "Yu turn the grindstun for me so I kan grind my ax now, an I'll turn it for yu when yu want tu grind, an thus the politihul game is playd."

A man who hez meny faultz ov his own iz very apt tu see them in uther pepul.

Good moruls ar the children ov right livin an good breedin.

Bad habits an moruls ar oftun acquired bi goin in bad kumpany—then keep out ov it.

Livin er rightys life every day iz the best sermun er mortul kan preach.

Prechin an not praktisin what yu prech makes yu er hipokrit. Then praktis first an prech afturward.

Thar's az much difurence between bein er reul Christian an uly profetin tu be one as thar iz between heaven an hell.

To turn an twist scriptur tu suit yur views may be plesunt tu yu, but it iz kontemtibul in God's sight.

Henry Ward Beecher.—I have always thought that the cow is the greatest means of advancing civilization. I have traveled through the great countries of the west and have seen the large grain farms, where the man will go and work the farm for a while until the soil becomes exhausted somewhat and will then move on to another location. But the man with a cow, even a single cow, is always home. He must be with that cow every morning and every evening and every day of the year and where he milks that cow there will be his permanent home.

Dr. John Timothy Stone emphasizing the value of not overemphasizing oneself, told the story of a little colored boxer who was drinking in a saloon and laid a five dollar bill on the bar. When the barkeeper handed back the change a big darky stepped up and gathered it up with the boastful assertion, "Ahs de bully ob dis town and when enny money lies raun, like dat Ah takes it." The little boxer let flash his fist and the big bully landed ten feet away. He pulled himself together and looking dazedly at the little fellow asked, "Who is you all ennyway?" The other replied, "Ahs de fellow you tought you wus when you came in hyar."

When October Comes Along.

Written for Green's Fruit Grower by Mr. Hamilton.

Now here October comes along,
I'd know it by the cricket's song;
Because it sings so soft an' low
Just like—poor thing—t was 'fraid of snow.

An' every night the tree frogs scold
An' holler out there in the cold;
Seems like tonight they holler more,
An' closter up towards the door.

The Katydid has flew away—
Or maybe captured by a Jay—
Poor Katy did one of these two,
Just like some other Kadies do.

October comes just like old age,
A-creepin' on us stage by stage
An' like our heads now bald an' gray,
The trees get bare just that-a-way.
The hazy air seems filled with bliss,
But day by day some flower we miss,
That turned to us a pleading face
Like we could keep the frost apace.
Like farewells we have said to friends
The Autumn days October ends;
Its days remind of summer sun,
Its nights of winter soon begun.

Faithful Ever.

Written for Green's Fruit Grower by Albert E. Vassar.

The glorious sun in western skies,
Now fadeth from our view,
And with a smile in pleasing style
She bids us all adieu.
Then creeps the darkness o'er the earth—
From "tail loud" we away,
We wake from sleep the sun to greet,
With smiles at dawn of day.

They Never Have Dyspepsia

We are apt to shudder with disgust at the idea of eating dog, but dote on pig. We cannot conceive any person eating grasshoppers, but consider snails a delicacy. Yet the Chinese as a race have fine teeth, never have dyspepsia, gout, sick headache, disordered stomachs. So there is something to be said in favor of their diet and methods of preparing it. The main materials at their command are fish and rice. But in a nation of 400,000,000 persons, necessity governs choice, and they use things and make them palatable by cookery which they practice to perfection. Once a year, to insure this they make a sacrifice to the god of the kitchen. We of the West sacrifice daily to that Moloch!

The Chinese cook everything. They fear uncooked food, so everything is popped into the pot and boiled. Such small quantity of meat as they have is cooked to a paste, so the danger of swallowing it unchewed does not exist for them.

They cook all fruits, and as they never eat bread, they make up by eating various grains and vegetables.

The South—The Homeland

FOUR TO SIX TONS OF ALFALFA, 50 to 100 bushels of corn to the acre, \$100 to \$500 an acre from fruit or truck, opportunities for the stock raiser and dairyman, a climate which means two to four crops a year, pleasant home locations, attractive land prices, are things the South offers homeseekers. Our publications and special information on request.

M. V. RICHARDS
SOUTHERN Ind. and Agr. Com'r. Southern Ry. Station
RAILWAY Room 44 Washington, D. C. 645a Bldg.

DOMESTIC JUNIOR

The Engine for all Small Farm Jobs
The Junior has the same superior quality as the larger, higher-priced Domestic Engines. Orchardists and farmers find it most economical and labor-saving. Runs pump, cream separator, churn, spray pump, grindstone, corn-sheller and all other machines requiring light power. Our catalog shows and describes "The Quality Line" of Domestic Engines, Pumps, and Power Spraying Machines. Write for it. Domestic Engine and Pump Co. Box 503, Shreveport, La.

Weight 375 lbs. Ready to run when received.



Lower Cost To Eastern Power Users

The better to supply our increasing Eastern trade, we are carrying a complete stock of engines, spare parts and accessories in our new factory branch in Pittsburgh, Pa.

WITTE ENGINES

Gasoline, Gas, Kerosene, Distillate. Liberally Guaranteed for 5 Years.

Our Pittsburgh branch means a saving in freight to our Eastern customers, as well as a big saving in time of delivery of engines. Also it makes the time shorter for correspondence, as the Pittsburgh office is fully equipped with competent people from our home office to carry on all business and give complete service the same as has been the case in our Kansas City office for so many years.

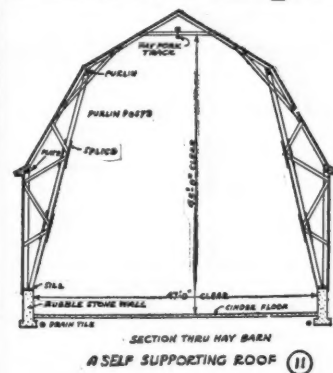
Lower Prices; Better Engines; Send for New Free Book Write our nearest office and get our latest offer—cash or easy terms before you arrange to try any engine. Let us show you our new eye-opener. Write today.

Ed. H. Witte, Witte Engine Works
2372 Oakland Ave., Kansas City, Mo.
2372 Empire Building, Pittsburgh, Pa.



When you write advertisers Please mention Green's Fruit Grower

Learn Carpentry at Home



There's a book on the subject of Good Carpentry that you may get for the asking—it is free, absolutely, and it will be of great value to you. Write today for Vol. 36, Cypress Pocket Library—it is "IT."

A REAL GUIDE BOOK

Rural Life, Rochester, N.Y., says: "It is a Guide Book for the man or boy who can handle a saw or hammer and wants to know how to handle them to the best advantage." A true saying.

FOR BOYS OR MEN

This Carpentry Book has 48 pages of interesting reading and illuminating pictures, and a plan sheet 24x36 inches showing how to make easy a dozen hard jobs of house and barn building. Every boy and every man who sees this advertisement should write for the free book—it is Vol. 36.

CYPRESS BEST LUMBER & SHINGLES

This splendid book also tells a lot about the superlative quality of Cypress wood, and how it lasts and defies decay under the most trying conditions. It is a natural farm wood—none other like it. Your local lumber yard carries Cypress, or it will get it if you insist hard enough.

FOUR FREE FARM BOOKS

Vol. 4 is the BARN Book, with plans for 4 barns; Vol. 20 is the FARM NEEDS Book, with plans for 8 farm outbuildings; Vol. 36 is the CARPENTRY BOOK, with 12 plans and sketches of difficult jobs in carpentry, and Vol. 37 is the NEW SILO BOOK.

Southern Cypress Mfr's Ass'n.

114 Hibernia Bank Bldg.
New Orleans, La.
or
114 Heard Nat'l Bank Bldg.
Jacksonville, Fla.
(Address nearest office for quick service)



So. Cypress Mfr's Ass'n. Department 114

Please send me FREE books marked in the following squares:
☐ Barn Book (4 plans) Vol. 4.
☐ Farm Needs Book (8 plans) Vol. 20.
☐ Carpentry Book (12 plans) Vol. 36.
☐ Silo Book (plans) Vol. 37.

R.F.D. _____ Town _____
State _____

ORNAMENTAL FENCE
40 designs—all steel. Handmade, costs less than wood, more durable. We can save you money. Write for free catalog and special prices.
ROSE-FENCE MACH. CO.
451 North Street, Kokomo, Ind.

NEW BOOK FREE BROWN POULTRY FENCE
Costs half as much as netting, lasts 5 times as long. Get book of freight prepaid prices. Direct from factory. 150 styles of fence, gates and steel posts. Sample also free.
Brown Fence & Wire Co., Dept. 29 Cleveland, O.

KITSELMAN FENCE
Get It From the Factory Direct
Made of KITSELMAN Open Hearth wire, heavily galvanized—a rust resisting fence—**HORSE-HIGH, BULL-STRONG, PIG-TIGHT**
Sold direct to the Farmer at **25 CENTS A ROD**
Our big free Catalog of fence bargains shows 100 styles and heights of Farm, Poultry and Lawn Fence at money saving prices. It tells how we make wire, why it's better, why it lasts longer and why Kitseleman Fence is the most economical fence to buy. Let us convince you of these facts. Write today.
KITSELMAN BROS., Box 208 Muncie, Ind.

Dumps Like a Shovel
Earth doesn't clog or stick in the Standard Earth Auger. Digs easy; like boring a hole through soft pine board with a brand new brace and bit. Digs wells, post-holes or holes for any purpose.
STANDARD Well-Boring Outfit
Digs a 40 ft. well in one day. Will go as deep as 100 ft. Pure sparkling water all the year round from a "Standard" outfit well. Make \$20.00 a day boring wells for your neighbors. Your own well for nothing and the auger yours to dig any holes you want about the place. Our illustrated booklet tells you all about it. Enclose 2c stamp to cover postage. Write Now.
STANDARD AUGER CO.
37-N W. 43rd St., Chicago, Ill.

Don't Wear a Truss



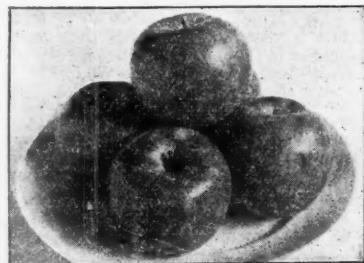
C. E. Brooks, 1772-A Brooks Bldg., Marshall, Mich.

BROOK'S APPLIANCE the modern scientific invention, the wonderful new discovery that relieves rupture will be sent on trial. No obnoxious springs or pads. Has Automatic Air Cushions. Binds and draws the broken parts together as you would a broken limb. No salves. No lies. Durable, cheap. Sent on trial to prove it. Pat. Sept. 10, 01. Catalog and measure blanks mailed free. Send name and address today.

TABLE SIRUP FROM APPLES

Department of Agriculture Discovers Way to Utilize Cider.

The new sirup, one gallon of which is made from seven gallons of ordinary cider, is a clear ruby or amber colored sirup of about the consistency of cane sirup and maple sirup. Properly sterilized and put in sealed tins or bottles, it will keep indefinitely, and when opened, will keep under household conditions as well as other sirups. It has a distinct fruity aroma and special



flavor of its own which is described as being practically the same as the taste of the sirupy substance which exudes from a baked apple.

The sirup can be used like maple or other sirups for griddle cakes, cereals, household cookery, and as flavoring in desserts. The government cooking experts are at present experimenting with it in cookery and expect shortly to issue recipes for use of the new sirup in old ways and for taking advantage of its special flavor in novel dishes.

The process is described as follows: The raw cider is treated with pure milk of lime until nearly, but not quite, all of the natural malic acids are neutralized. The cider is then heated to boiling and filtered through a filter press, an essential feature of the process. The resultant liquid is then evaporated either in continuous evaporators or open kettles, just as ordinary cane or sorghum sirup is treated. It is then cooled and allowed to stand for a short time which causes the lime and acids to form small crystals of calcium malate. The sirup is then re-filtered through the filter press, which removes the crystals of calcium malate and leaves a sirup with practically the same basic composition as ordinary cane sirup. Its flavor, however, and appearance are distinctive.

Co-operation

We farmers still cling to the old practice that every man's duty is to look out for himself, which is quite true, and there is no

better way of doing this than through co-operation. We have not yet realized or come to the conclusion that it is to our interest to co-operate and help along our fellow farmers. Now what is meant by co-operation? Simply uniting and working together. No other business or organization can possibly take the place of good profitable farming; yet this business is put down most. The farmer makes one great mistake by trying to be too independent. Co-operation would be the means of our securing better prices for our crops, paying less money for what we purchase, living more easily and contented, and with far less hard labor, all of which is now due to our being too independent and careless to work together with our neighbors and fellow farmers for the betterment of ourselves and the country at large. I am glad now to be able to state that most farmers are now beginning to realize the benefit derived from co-operation, as the Farmers' Union is now doing good business in this country and state. Thousands of dollars were saved the past year on fertilizers alone, and if there is such a saving on fertilizers, there is bound to be a good deal saved on other things we have to buy. One of the greatest troubles which the unions have to contend with is that they do not stick together long enough to feel the effects of co-operation. If they do not get the benefit from it at once members begin to drop out one by one, and that soon winds up the organization. Another thing: it is a good idea for farmers to co-operate or work together in their farming affairs, such as planting, working and harvesting their crops, or anything else; and especially is this true now, due to scarcity of labor and high prices to be paid for same. So let each of us, brother farmers, try and get that co-operative thought or spirit more so than heretofore, and work together in all of our business affairs whenever possible. We will then soon find that it is to our interest, and until we do get this co-operative spirit of helpfulness between one another, we may expect our progress of course along this line to continue slow as long as we are farmers.—*Southern Ruralist*.

SWEET CLOVER FOR PASTURE AND POOR SOIL.

By William G. Eckhart, University of Illinois in Better Farming.

A great use that the writer sees for sweet clover is for permanent pastures. One needs only to go to Frank Coverdale's farm at Delmar, Iowa (the writer was there three times during the past season), where 150 acres of sweet clover are grown, and see the fifteen-year old pasture, to be convinced of its usefulness. Cattle were allowed to graze on the field until the last of June. The clover was then allowed to produce seed.

"Look under your feet," said Mr. Coverdale, "and see the blue grass." Here, surely, was an example of two plants working together or rather the sweet clover helping the blue grass by gathering nitrogen and leaving some in the roots and parts of the plant returned to the soil. The cattle had another feast when the seed was removed in August, for the young sweet clover plants and blue grass made a splendid fall pasture. By pasturing, the first growth is kept back enough so the seed shattered out the season before makes a good stand for the season following. Limestone will be a necessity on these pasture fields where the soil is acid.

It is to be especially noted that the sweet clover and blue grass make a splendid hog pasture.

Fooling the Bugs

A small boy seated on the curb by a telephone pole, with a tin can by his side, attracted the attention of an old gentleman who happened to be passing.

"Going fishing?" he inquired good-naturedly.

"Nope," the youngster replied. "Take a peek in there."

An investigation showed the can to be partly filled with caterpillars.

"What are you doing with them?"

"They crawl up trees and eat off the leaves."

"So I understand."

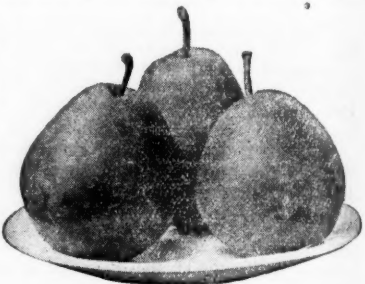
"Well, I'm fooling a few of them."

"Sending 'em up this telephone pole."—Judge.

BARTLETT THE GREATEST PEAR OF ITS SEASON

I am often asked which is the best pear, which is the best apple, which is the best peach or plum or grape. I consider myself safe in replying that the Bartlett pear is the most desirable of its season either for home use or for market.

Most early pears are extremely perishable. Bartlett is the earliest pear that can claim



remarkable keeping qualifications.

I pick Bartlett pears while green in color and very firm in flesh. In this condition it can be shipped long distances and can be kept in cold storage almost an indefinite length of time. When the trees are overburdened with a heavy crop of Bartlett pears I thin out the fruit when not much more than half grown, at least a month before harvesting the bulk of the crop. These early picked Bartlett pears ripen up perfectly, sometimes requiring two weeks for this ripening process. The pears left upon the trees increase rapidly in size owing to the thinning out process. This is something that does not occur with most varieties of pears.

I consider the quality of Bartlett superior to any of its season. It has a pronounced rich flavor. Some people can detect a slight mustiness but it is scarcely noticeable to me.

I am to-day, September 15th, feasting on Bartlett pears. I have been eating them for two weeks. They are now at their very best in quality and beauty. Each pear is of a peculiar attractive yellow color which would bother the artist to reproduce. These pears are juicy and delicious.

Bartlett pear on account of its value as a dessert fruit occupies a high position. As a market fruit there is no other of its season that compares with it. People come in from various sections to the Rochester district with orders for carloads of Bartlett pears. These are often placed in cold storage where not used for canning by the large canning establishments.

I had almost forgotten to speak of the beautiful shape of the Bartlett pear with its long neck, long gracefully curved stem and plump substantial base. Surely the Bartlett is an ideal pear in shape, in color and in quality.—C. A. Green.

Fall Fertilizers for Lawn

Ground Bone Meal and Wood Ashes:
—Many people object to the use of manure at all on lawns, not only because of the danger from weed seeds, but because of its unsightly and insanitary appearance. These will undoubtedly prefer to use something else, and the most economical substitute is finely ground bone or bone meal. This should be applied at the rate of from 500 pounds to one ton per acre, according as the ground is more or less rich. It should cost between \$25 and \$30 a ton.

With the bone meal, it is desirable to use double the quantity of wood ashes. These ashes contain considerable lime in a very desirable form, as well as other valuable elements. However, they are apt to be more or less costly.

Ordinarily muriate of potash would be found more economical than wood ashes, although the potash does not contain the lime which the other fertilizer imparts to the soil. On account of the European war, the potash may prove more difficult to obtain than the wood ashes. Only one-tenth the quantity of potash should be used as of bone meal.

Prepared sheep manure is an excellent dressing. As it has been sterilized by drying and rendered odorless, there are not the objections to it that there might be to ordinary manure. Its one drawback is expensiveness.

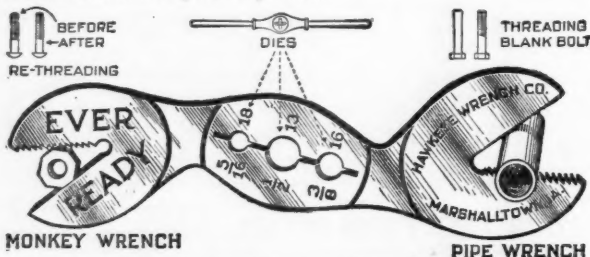
It is hardly necessary to say that nothing will be gained by scattering grass seed on the lawn at this season.

A Real Necessity for Every Farm and Home

An All Purpose Handy Wrench

The Ever Ready

A LIGHT, compact tool you can carry in the hip pocket. Made from the finest tool steel, oil tempered and highly polished. Is both a pipe and nut wrench. It has three standard size dies that will re-thread and cut new threads on bolts. A very handy tool in repairing broken bolts. Just the thing to remove Rowe and Neverslip Calks. This wrench will work in very close quarters.



MONKEY WRENCH

PIPE WRENCH

HOW TO GET ONE

Send one three-year subscription (new or renewal) to Green's Fruit Grower, with One Dollar to pay for same, and we will send you one of these handy tools postpaid, without cost, to pay you for your interest. Send now before it slips your mind.

Green's Fruit Grower Company, Rochester, N. Y.

Aunt Hanna's Replies

The Plain Girl vs the Beauty

Dear Aunt Hanna: I suppose every girl wants to be beautiful. I am not beautiful. I am a plain girl. What can you say to me in the way of encouragement? Plain Girl.

Aunt Hanna's Reply: Don't worry. Plain girls are usually more intelligent and more entertaining than beautiful girls. Those who are possessed with beauty rely upon their good looks, since they find that their pretty faces attract attention, therefore they do not always cultivate their minds and do not pursue studies or any occupation as a rule so thoroughly and successfully as plain girls do.

But the best encouragement I can give you is that the plain girl grows more attractive as she grows older, whereas beauty soon fades away from a girl's face. I have in mind two women. One of these as a girl was so beautiful she attracted universal attention wherever she went and was the cynosure of all eyes. The other was intelligent and well formed but attracted no attention as a girl. But when these two women advanced in years and when their hair was whitened with age, she who had been a plain girl would attract attention wherever she went by her grace and the expression of her face and by her culture and attainments. The other who had been so beautiful in her youth was like a faded flower of yesterday, attracting no attention in any way except to have it noted that she was an old, wrinkled and faded lady.

So you see that to be attractive we need not have the most regular features or the fairest complexion or the most classical form. A beautiful character is more attractive than a pretty girlish face. You can do much to improve your appearance by giving thought to your dress, wearing becoming apparel and that which is not too showy. See that your clothing is in immaculate condition. Take good care of your health, for abundant health is of itself attractive. Study your own good points and make the most of them, whether it is your bright eyes, your clear complexion, your beautiful teeth, your graceful carriage, your pleasing manners, your good nature, your unflinching courtesy, your keen intelligence or your personal magnetism. Everyone has some good features or characteristics. Strive not to be self-conscious, be a good listener to others' conversation, devote yourself to making others happy, and you will be not only popular but loved.

Secrets of Happy Marriages

A well-known doctor has advanced the ingenious theory that the secret of happy marriage is for a man to marry a woman who as near as possible resembles him in physical appearance, or vice versa. A tall man, with fair hair and blue eyes, should seek a mate who stands about his own height and has the same colored hair and eyes as himself. According to the medical expert, many unhappy alliances are due to the fact that tall, fair men marry short, dark women, or short, dark men choose tall, blonde brides. Physical characteristics denote certain mental traits and thus people who are not alike in appearance also differ in their respective opinions on men and matters.

Experts in this kind of character reading say that tall, thin and dark men are generally mean, unimaginative and morose. On the other hand, short women of the fair persuasion are more often than not very kindhearted, generous and high-spirited. Combine these two opposite characters and trouble inevitably results. The two opposites will get on each other's nerves in their journey through life.

Happy is the fair, blue-eyed man who wins the affection of a girl of similar height and appearance. The characteristics which the color of his eyes and hair denote, such as love of art, music and home life, will also exist in the girl he leads to the altar. Often one hears the expression, "Isn't that a nice couple? How like each other they grow!" when a devoted husband and wife are discussed. That, in brief, illustrates the

really happy marriage; the smooth, harmonious existence of a married couple who are so alike in their likes and dislikes that they think and act almost as one.

Who Am I?

I am the foundation of all business.

I am fount of all prosperity.

I am the parent of genius.

I am the salt that gives life its savor.

I have laid the foundation of every fortune in America, from Rockefeller's down. I must be loved before I can bestow my greatest blessings and achieve my greatest ends. Loved, I make life sweet and purposeful and fruitful.

I can do more to advance a youth than his own parents, be they ever so rich.

Fools hate me; wise men love me.

I am represented in every loaf of bread that comes from the oven, in every train that crosses the continent, in every ship that steams over the ocean, in every newspaper that comes from the press.

I am the mother of democracy.

All progress springs from me.

Who am I?

What am I?

I am work.—The "Review."

I consider the above one of the most noble articles I have ever read. I trust the reader will read the above the second time, or several times, or keep it before him and read it every day.

Work is indeed godlike in that which it produces in the way of character and the upbuilding of almost everything on the face of the earth. The trouble with many men is not that they are short of money but that they shirk work. They do the things the easiest way and let the other fellow do the hard things.

And then how true it is that we must love our work. If we have no love for it if we have to be driven into it, and have someone stand over us and hit us on the head unless we work, work will have no blessing for us and little reward. Thus you see how important it is that we select the right vocation in life, a vocation in which we will be inclined to work over hours if necessary, or without pay if necessary, simply for the joy of working.—C. A. Green.

Editor Green's Fruit Grower:—The Richard Graft or "Derrick and Ann" apple was originated but a few miles from here at Greenport in Columbia Co., by Richard Delamater, and was first propagated in a nursery by a Mr. Studley at Clavarrack, in the same county. I heard a good apple man say this fall that if he could have only one variety of apple on his place it would be the Richard Graft.

While I cannot acquiesce to that degree, yet I think I could say that if I were to be allowed but two varieties, I would want it for one of them. With us the apple comes on right after the Astrachan, and you can keep on picking it until almost the latest ripening winter varieties have gone. I know of no other variety of apple that has even one half so long a period of successive ripening. This makes it very desirable as a family apple, and I think has been the only reason why it has not been extensively planted in a commercial way. As a dessert apple it is about equal to the Gravenstein, which it very much resembles, only that it is a trifle more tender. It stews well; and when it comes to baking, it has them all—even Spy, Spitz and McIntosh—skinned a mile! And that reminds me, it should also be skinned. "There's a reason" why the restaurant apple should be baked with his jacket on, because it puffs him out and gives him aldermanic proportions commensurate with the price. But to properly bake an apple it should be carefully pared, cored, and the core space filled with sugar. Then when it comes out of the oven, instead of a wrinkled, opaque, bitter-tasting fruit, we have one that is translucent, finer in texture, devoid of any bitterness, delighting both eye and palate. And now with a little cream and a dash of sugar, we have a breakfast fruit, or a dessert if you please, that cannot be surpassed by any fruit of any climate, and one that we can have on our tables any month in the year. A potato, I'll admit, is improved by cooking in his jacket, but to eat an apple cooked in his, why I'd as soon, if I were a cannibal, eat a missionary baked in his flannel shirt!—Harvey Losee, N. Y.

It is possible to live on fruits only without water. Fruits supply to us food, drink and perfume. Most all true-shaped fruits smell sweet.

Remedies for Aphis—(Plant Lice)

Mr. C. A. Green: I noticed an inquiry how to rid an orchard of aphis or lice in a recent issue. I have found several effective sprays.

Black Leaf 40. 3/8-pint to 50 gallons of water with 2 pounds of dissolved soap.

Commercial Lime Sulphur. 1 part to 70 parts of water.

I also tried crude carbolic acid and found it did good work and was also a cheap spray.

For my own benefit I have worked out the following table and have given it to several friends who own a few fruit trees. Recipes are always given for large amount of spray material:

One gallon mixtures.
Arsenate of Lead—paste.....1 oz.
Pyrox—paste.....3 oz.
Nitrate of Soda.....2 oz.
Crude Carbolic Acid.....29 drops
Black Leaf 40.....1 teaspoonful

Also for people who do not possess a small pair of scales.

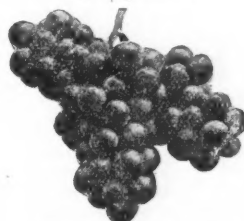
45 drops.....1 teaspoonful
360 drops.....1 ounce
2 teaspoonfuls.....1 tablespoonful
2 tablespoonfuls.....1 ounce

The above applies to liquid measure. The magazine that will devote space to spray mixtures of one gallon will receive the thanks of thousands of readers who own a few fruit trees, bush fruits, rose bushes, etc.—F. P. Whicher, Ia.

Shoulder Your Load

Cleveland Plain Dealer.

Don't peddle out your troubles,
Don't stumble in th' track;
Most folks will call 'em bubbles,
An' laugh behind your back.
Pick up your load an' bear it—
Altho' th' way be long;
An' ask no man to share it—
Be true, an' brave, an' strong.



Best Soil for Grapes

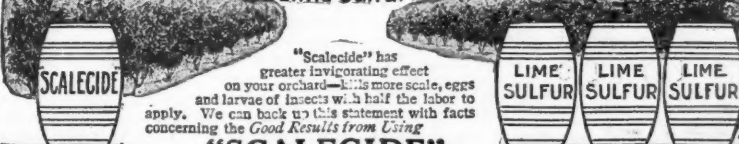
In reply to this question I will say that grapes will succeed on almost any kind of soil, but like almost everything else there are certain soils in which the grape succeeds better than others. No one should hesitate to plant grape vines about the home, the outbuildings, or the garden, fearing that they might not do well in that particular soil, for you can grow grapes successfully in almost any soil. When it comes, however, to the planting of large vineyards, the question of soil is important.

For vineyards the soil should be porous and well drained naturally or artificially. Graveley, shaley or sandy loams are favorite soils for vineyards. I would not select a stiff clayey soil for a vineyard nor a very light sandy soil.

The grape is one of the most easily grown fruits. There is no reason why every farmer and every villager should not have an abundance of grapes not only for his own use but for sale. The largest profits in grape growing are secured by the villager who has from ten to fifty grape vines growing on the borders of his garden. He is able to sell his surplus grapes to his neighbors and to the villagers generally at a far better price than most grape growers get after shipping to market and paying commissions.—C. A. Green.

One Barrel of "Scalecide"

Will Spray as many Trees as Three Barrels of Lime Sulphur.



"Scalecide" has greater penetrating effect on your orchard—kills more scale, eggs and larvae of insects with half the labor to apply. We can back up this statement with facts concerning the Good Results from Using "SCALECID"

Send for our illustrated booklet—"Proof of The Pudding". Tells how "Scalecide" will positively destroy San Jose and Cottony Maple Scale, Pear Psylla, Leaf Roller, etc., without injury to the trees. Write today for this FREE book and also our booklet—"Spraying Simplified". Learn the dollars and cents value of "Scalecide, The Tree Saver".

Our Service Department can furnish everything you need for the orchard at prices which save you money. Tell us your needs.

B. G. PRATT CO., Mfg Chemists Dept. F 50 Church St., New York



Make your own Fertilizer at small cost with
Wilson's Phosphate Mills
From 1 to 40 H. P. Send for catalogue. G
WILSON BROS. Sole Mfrs., Easton, Pa.

Only \$2 Down
One Year to Pay!

\$24
Buys the New Butter-
fly Jr. No. 2. Lightning-
easy cleaning, close skim-
ming, durable. Guaranteed
a lifetime. Slices 95 quarts
per hour. Made also in four
larger sizes up to 1-2 shown here.
It saves in cream. Postal brings free cal-
culation folder and "direct-from-factory" offer.
Buy from the manufacturer and save half.
ALBAUGH-DOVER CO. (INC.)
2156 Marshall Blvd. CHICAGO No. 595

Beacon FREE
Burner
FITS YOUR OLD LAMP.
100 Candle Power Incandescent
pure white light from (kerosene) coal
oil. Beats either gas or electricity.
COSTS ONLY 1 CENT FOR 6 HOURS
We want one person in each locality to
whom we can refer new customers.
Take advantage of our Special Offer to
secure a Beacon Burner FREE. Write
today. AGENTS WANTED.
HOME SUPPLY CO., 14 Home Bldg., Kansas City, Mo.

CIDER PRESSES
We furnish outfits for any
size mill, from the small-
est to the largest. Our
Presses, Graters, Evap-
orators, Pumps, etc.,
are "the standard."
DOOMER & BOSCHERT PRESS CO.
141 W. Water St., Syracuse, N.Y.
Established 1872.

KEES FRUIT PICKER

You don't have to lose
the fruit in the top
branches nor climb a
tall ladder to get it, if
you use this handy tool.
Gathers peaches, apples
and other fruit as care-
fully as by hand and
much less work.
Price complete, except the
long handle (a fish pole will do)
only 50 cents each delivered to your door by parcel post.
Your money back if not O. K. Order now so you'll be sure
to have it when you need it. Circulars free on request.
F. D. KEES MFG. CO., Box 800, BEATRICE, NEB.

95 AMERICAN
and
CREAM
SEPARATOR
FREE TRIAL, FULLY GUARANTEED.
Easy running. Easily cleaned.
Whether dairy is large or small,
obtain our handsome free catalog. Address
AMERICAN SEPARATOR CO. BAINBRIDGE, N. Y.

HESS
FERTILIZERS
WANT AGENTS
S. M. Hess & Bro.
(INC.) Room B
4th & Chestnut Streets
Philadelphia, Pa.

When you write advertisers
Please mention Green's Fruit Grower.

Classified Advertisements

No display advertising will be placed in this department and no type larger than 6-point. The first three words only to be printed in capital letters. Each abbreviation and number will count as one word. Rate 10 cents per word for each insertion. No advertisement inserted for less than \$1 per issue. We cannot afford to do any bookkeeping at this rate. Cash must accompany every order. Orders must reach us not later than the 15th of the month previous to the month in which the advertisement is to appear.

Terms: CASH WITH ORDER.

Green's Fruit Grower Co., Rochester, N. Y.

AGENTS WANTED

YOUNG MAN, would you accept a tailor-made suit just for showing it to your friends? Then write Banner Tailoring Co., Dept. 149, Chicago, and get beautiful samples, styles and a wonderful offer.

NEW INVENTION. Apple syrup made from cull apples. Cuts living expenses. Start agency. Formula 25c. Farm Specialty Co., Box 486, Iliou, N. Y.

FARMS WANTED

FARMS WANTED. We have direct buyers. Don't pay commissions. Write describing property, naming lowest price. We help buyers locate desirable property free. American Investment Association, 32 Palace Bldg., Minneapolis, Minn.

WANTED—To hear from owner of good farm or unimproved land for sale. H. L. Downing, 113 Palace Bldg., Minneapolis, Minn.

FARMS FOR SALE

FRUIT, POULTRY FARM sacrificed, ill health; 60 acres, two houses, 600 fruit trees, macadam road. Arthur Stevens, Moscow, Pa.

SELL YOUR PROPERTY quickly for cash, no matter where located; particulars free. Real Estate Salesman Co., Dept. 22, Lincoln Neb.

HELP WANTED

WORK FOR Uncle Sam. He is the best employer. Big pay, sure work, easy hours, long vacations, rapid advance. Thousands of jobs open this year. I will help you get one. Write for my big FREE Book D Y-1146 today.—Earl Hopkins, Washington, D. C.

WANTED—Men to get members and establish lodges on commission basis for the Owls, South Bend, Indiana.

WANTED—Men and Women—18 or over for U. S. Government Jobs. \$75 month. Steady work. Common education sufficient. Write immediately for list positions now obtainable. Franklin Institute, Dept. C-147, Rochester, N. Y.

REAL ESTATE FOR SALE

SOUTH ATLANTIC AREA—An empire of fertile lands and opportunities. The Seaboard Air Line Railway traverses six of the richest Southern States from the green fields of Virginia to the orange groves and mid-winter vegetable gardens on the Gulf Coast of Southern Florida. Choice locations for fruit, truck, general farming, stock raising, dairying and poultry at low prices and within easy reach of large markets. Combination of soil and climate with growing seasons from 200 to 345 days affords a wide range of possibilities. Let us direct you to the section best suited to your purposes. Our books of facts and photos mailed free. Ask J. A. Pride, General Industrial Agent, SEABOARD AIR LINE RAILWAY, Suite C-14, Norfolk, Va.

GREENHOUSE NEAR LIVE New Hampshire city, modern build, 22,000 feet covered, eighty deg. heat, produce or flowers, easy terms. Illustrated Catalogue postpaid; Chapin Farm Agency, 294 Washington Street, Boston, Massachusetts.

FOR SALE

DUROC PIGS \$15 pair. Mated. Ped. 8 Weeks, DeGraff, O.

GINSENG SEED sold or exchanged for Indian relics. Albert Gelser, Dalton, N. Y.

VIOLIN FOR SALE cheap. Send on trial. Write Miss Bertha Mardiss, Route 5, Rosedale, Kansas.

APPLE BARRELS. 32 cents each, egg cases six cents each, all orchard and poultry supplies, prices subject to change. McKanna's Cooperage, Honesdale, Pa.

MILCH GOATS: Write George Wickham, 2916 East Central, Wichita, Kansas.

FULL BARREL LOTS slightly damaged Stoneware well assorted for household use, shipped any address direct from pottery, Ohio, for \$1.00. Send cash with order. E. Swasey & Co., Portland, Maine.

WRITE FOR SPECIAL prices on Cumberland and Gregg Raspberry Plants. S. H. Graybill, Richfield, Penna.

PATENTS

PATENTS WANTED. Write for Our Four Books sent Free to any address. What To Invent contains list of Inventions Wanted. \$1,000,000 in prizes offered for inventions also list of Inventions Needed on Farms compiled from information secured from Department of Agriculture. Send for List of Patent Buyers with requests from manufacturers regarding New Ideas they wish to purchase. How To Obtain a Patent contains 100 mechanical movements illustrated. Send us a model or sketch of your invention for free search of Patent Office records to ascertain if patentable. We secure Patent or Return fee and advertise all patents obtained by us Free. We assist inventors to sell their patents.

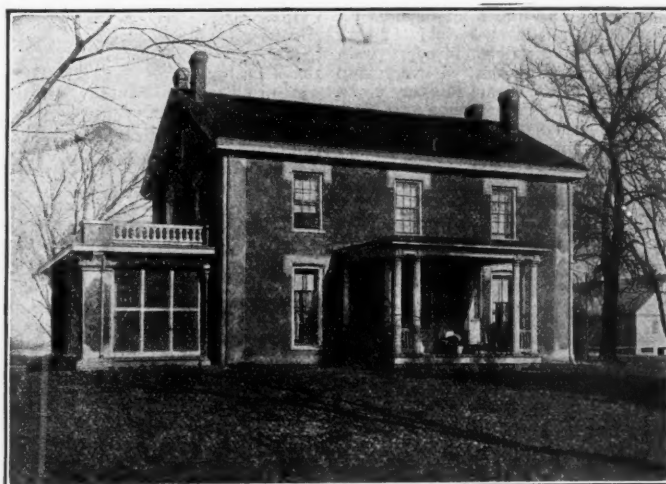
VICTOR J. EVANS & CO., 22 Ninth St., Washington, D. C.

Stucco For Old and New Buildings

Materials.—The materials composing stucco consist of Portland cement and sand with a small admixture of hydrated lime or slacked lime putty to give the mortar more plasticity. The lime also tends to whiten the stucco. The sand should be free from organic matter and uniformly graded from coarse to fine. The lime should also be uniform in quality.

The proportions for the first coat are 1 part Portland cement to not more than 2½

manner as described for the previous coat. In the third coat the proportions are 1 part Portland cement to not more than 2½ parts sand nor less than 2 parts sand by volume. Lime may be added in the proportion of 10 per cent. of the volume of cement. It is sometimes the custom to use only two coats for ordinary work and in this case the third coat just described is the finish coat, the second coat being omitted. The surface finish decided upon, such as rough



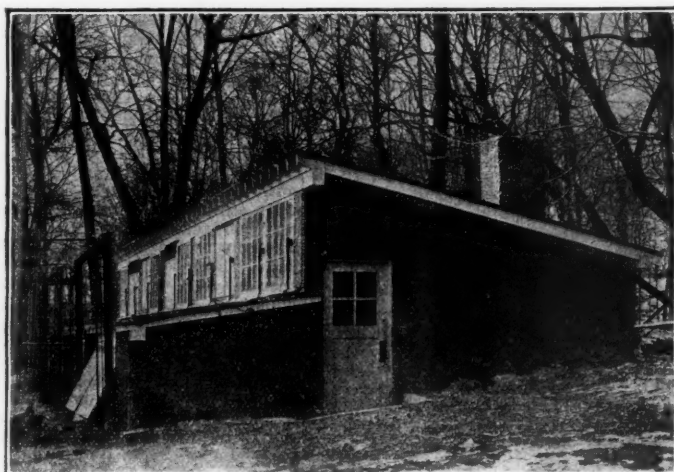
A BRICK HOUSE BUILT AT STATE COLLEGE, AMES, IOWA, IN 1862
Becoming dilapidated, it was restored with stucco, as shown

parts of sand by volume. Where lime is used 10 per cent. by volume of the cement is the usual amount. In the first coat enough hair or vegetable fiber is added to insure a proper bond or key between the lath and mortar. The most satisfactory construction for the first coat is to plaster, if possible, on both sides of the lath, thus thoroughly imbedding same. If this is not possible the lath is applied to sheathing boards and care must be taken to thoroughly force the mortar through the lath and in contact with the boards back of the lath. If this is properly done it will insure complete imbedment of the lath, which is particularly necessary where metal lath is

cast, pebble dash or float finish, is used on the surface of this third coat.

There are two very important precautions to be observed in the application of stucco. First, no stucco must be applied during freezing weather or if there is any possibility of the temperature dropping below freezing. Second, each coat must be kept damp and prevented from drying out by spraying or by hanging over the surface cloths which should be kept constantly wet. Cloths should be used where the stucco is exposed to hot sunshine.

Forms of Stucco Construction.—In all cases, whether structures are old or new,



A POULTRY HOUSE WITH STUCCO FINISH
This attractive structure illustrates the adaptability of stucco to farm buildings.

employed, for it will prevent possibility of corrosion. As soon as the first coat is applied and before the mortar hardens the surface is thoroughly roughened by scratching with a sharp instrument or saw-tooth paddle. After the first coat has been applied and becomes hard the second coat is applied to the roughened surface of the first coat. Before doing this the first coat must be thoroughly wet down with water to prevent the moisture from being absorbed from the second coat. The proportions of the second coat may be the same as those of the first with the omission of the hair or fiber. The surface of this coat is roughened and dampened in the same

they should have firm foundations and be sufficiently rigid to prevent any settlement or sagging, which will cause stucco to crack.

Charles A. Green:—I have had your Fruit Grower for the past few months and I find it more interesting and it is with pleasure, that I enclose my dollar for a three years subscription.—W. H. Poland Jr. Mass.

Mr. Green:—Please do not change your paper as you have the best paper I know of for its kind.—L. Landis, Ohio.

Soil Fertility

Fertility only means what the soil is capable of doing when it is in the best possible condition; and all farm practice for increasing fertility is based consciously, or unconsciously, on soil texture and structure. Cultivation and tillage are methods of maintaining good structure, but the texture is fixed by Nature and can be changed only at great expense.

The standard of perfection in soils is the "crumb structure," a condition where the soil is mealy or crumbly and porous, but not too loose; firm but not hard or consolidated; close grained but not run together or adhesive. This is seen in good garden and other soils in good tilth.

If one knows how soils are put together, just as he knows how his farm machinery is constructed, he is more liable to use it properly and to gain the longest use and most benefit from it. For example, how does moisture hold soil together and move in it? When a drop of liquid is placed on a solid it spreads out over the surface as a thin film which adheres closely to the solid. It will spread faster over sandstone or slate than over marble, because it is really being absorbed, or creeping down into the seeming solid by capillarity from particle to particle. The more porous the substance the quicker the absorption.

Just so moisture, from dew to irrigation waters, spreads over the soil and creeps down into it, coating each particle with a tightly adhering film, leaving the voids open for air, soil gases, ventilation.

Structure of the Soil.

Every farmer who knows what soil structure is and how to control it can help our nation to save \$500,000,000 a year, and at the same time get for himself all that he saves. This amount is enough to enable Uncle Sam to build a new Panama Canal each year. Is not that a job worth while? Is it not big enough to be worth the keenest thought and liveliest activities of a Congress?

Maintaining structure is absolutely necessary if we would keep up the productive capacity of the soil upon which the final destiny of America depends. The cost of land is increasing while the productive value is decreasing, a condition that cannot long continue without disaster.

Increasing land values call for greater returns per acre from the land.

Climate dictates what crops may be raised, but the condition of the soil dictates the amount. Command of the soil means command of the resources of life, varied pursuits and the satisfaction of varied wants.

Get Yours

Man forms a partnership with Nature, contributing brains and labor, while she provides the raw material. As a result, civilized man receives a better and better living; while the savage accepts what Nature is pleased to dole out and lives ever under the tyranny of her caprice.

Soil "texture" depends upon the proportion or percentage of the different sized grains of rock particles in the soil, and "structure" their arrangement or grouping together; and the size and percentage of the empty spaces called "voids." The soil particles are not in actual contact but are separated, except in the driest sand or dust, by a thin film of water which holds the particles together in a mass. If greatly magnified a bit of soil would look like bits of rock of all sizes and shapes, that had been moistened and then loosely piled together, leaving abundant air spaces between the particles; the liquid films acting as an adhesive. This wise method of weaving the soils together enables it to perform its proper functions.

The functions of a soil are twofold; first, it acts as a root-hold and home for the plant root; and second, as a storehouse furnishing food or nourishment for the growth and maturity of the plant.

Plants in order to live must have a root-hold in order to hold up the fruiting portion above the soil. The roots must have a home that is comfortable, through which they can move easily in any direction in their search for food and drink. They must have good air and good ventilation. They demand warmth and require mineral food. We must keep the soils clean as we do the stalls of our stables, by rotation that kills toxins; by drainage; by ventilation and by stimulating bacterial action.

For curran use of barny fertilizer, have rate ground renient, and planting ear plants have a the best plan apart and pl the rows. C as the roots g ing about the where there cultivation is on both old can keep the time allow e to renew the older shoots a fruit while th fruit. Wood usually be ren in each hill. The curran each season. early in the hatch, eat lib the pupa stage in June or J started. Use the first brood maturity, and appears use v to a gallon of oughly, and trouble. Hele loses its stren mosphere, hen by its use, but to give best Farmer. Plant Curran You have near in fall.

The best tim is during the f not be done du the reason tha the wood, per leaving the soil exposed. Who paint is very l vania Farmer. the cool fall m are not so ope of the paint do vantage of fal job can be do less with gnats. In painting that has not l the wood sho priming. This made very thin feet of this co pores of the w for the other c When a coati on two coats of suffice. After plied at least t applying the s coating is app has thoroly drie Fall is also paint tin, iron is certain tha roofing paint, o or coal-tar pro make up one's c of Venetian red dryer added, m as can be pu quickly mende spreading a pi over the wet p the canvas. W noticeable. Tin, iron an painted at lea so treated the If people woul investment and decay and rust, to spend mone buildings well p A great dea eventually tur from vegetatio oils, changed to fore we have p if we had no w

HOW TO GROW CURRANTS

Plant them in October or November.

For currants make ground rich by liberal use of barnyard manure and commercial fertilizer, having plenty of potash. Cultivate ground the previous season, if convenient, and have soil in fine condition for planting early in the spring before the plants have a chance to start growth. Use the best plants; set rows five or six feet apart and plants about four feet apart in the rows. Cultivate shallow after planting as the roots grow near the surface. Mulching about the plants is a good practice, but where there is a large number of plants cultivation is cheaper. Fruit is produced on both old and young wood; hence, one can keep the top cut back and at the same time allow enough new wood to develop to renew the head every few years. The older shoots are harder and produce more fruit while the new ones produce better fruit. Wood over three years old should usually be removed. Have about six canes in each hill.

The currant worm produces two broods each season. The eggs of the first are laid early in the Spring on the leaves. They hatch, eat liberally of the leaves, go into the pupa stage, come out and lay eggs again in June or July, when another brood is started. Use Paris green or arsenic for the first brood to prevent their coming to maturity, and when the second generation appears use white hebleore, a teaspoonful to a gallon of water. Do this work thoroughly, and you will not have serious trouble. Hebleore is a poison, but it soon loses its strength when exposed to the atmosphere, hence the fruit is not endangered by its use, but the material should be fresh to give best results, says Pennsylvania Farmer.

Plant Currants in October and November. You have nearly one year's time by planting in fall.

Fall Painting

The best time for doing outside painting is during the fall months. Painting should not be done during very warm weather for the reason that heat expands the pores of the wood, permitting the oil to soak in, leaving the pigments and coloring matter exposed. When this condition exists the paint is very likely to scale, says Pennsylvania Farmer. When painting is done in the cool fall months the pores of the wood are not so open, and the oil and pigments of the paint do not separate. Another advantage of fall painting is that a neater job can be done, because one is bothered less with gnats, flies and dust.

In painting a new building or a building that has not been painted for some time, the wood should first receive a coat of priming. This priming is regular paint, made very thin with linseed oil. The object of this coat of priming is to fill the pores of the wood and make a foundation for the other coats.

When a coating of priming has been put on two coats of the regular paint will usually suffice. After the first coat has been applied at least ten days should elapse before applying the second coat. If the second coating is applied before the first coating has thoroughly dried, the paint will likely scale.

Fall is also a good time of the year to paint tin, iron and paper roofs. Unless one is certain that he can purchase a reliable roofing paint, one that is free from coal-tar or coal-tar products, it is always best to make up one's own roofing paint. A mixture of Venetian red and linseed oil, with a little dryer added, makes as good a roofing paint as can be purchased. Leaky roofs are quickly mended by painting over the holes, spreading a piece of sheeting or canvase over the wet paint and then painting over the canvas. When dry the patch is barely noticeable.

Tin, iron and paper roofs should be painted at least every two years and when so treated their lasting qualities are doubled. If people would realize that paint is an investment and is a preventive of loss from decay and rust, they would be more willing to spend money for the purpose of keeping buildings well painted.

A great deal of coal contains grease, eventually turns black and hard resulting from vegetation growth and sewerage, and oils, changed to hardness by time. Therefore we have plenty of coal for the future if we had no winter season.

A Tribute to Prof. Van Deman by Cyrus T. Fox

My dear Friend Green:—It seemed like "a voice from the grave" to read the "Fruit Helps" in your August issue by Prof. H. E. Van Deman, whose death occurred several months ago.

I first became acquainted with Professor Van Deman about thirty years ago, when he was present at the annual meeting of the State Horticultural Association of Pennsylvania. At that time I was Chairman of the General Fruit Committee of the association, and he expressed his appreciation of the report in remarks which he made reviewing some of its special features. I was, also, at the same time Chairman of the Committee on Legislation and Professor Van Deman gave me some valuable suggestions in the framing of the "Peach Fellows Law," which is now on the statute books of Pennsylvania.

I met Professor Van Deman a number of times thereafter—at Farmers' Institutes and elsewhere. The last time that I saw him was at the Virginia State Fair, in Richmond in October, 1908, where we both were judges in the fruit department.

Few men did more for the fruit interests of this country than Professor Van Deman, and his death was a serious loss to the horticulturists of the United States.

Alfalfa

When well established, alfalfa does not need renewal very often, says Samuel Frazer, in Practical Farmer. It may be allowed to remain for ten years in many instances and will furnish three cuttings of hay per year. No other crop will turn off so much fodder in a given space of time. I have frequently seen the second crop grow an average of an inch per day for thirty days: in other words, make a thirty-inch hay crop in thirty days when the season was just right for it and this in the State of New York. In the section of the country through Pennsylvania and farther south there are vast areas upon which alfalfa can be grown with profit just as well as it can near Syracuse, N. Y., or in other sections of that State. In addition, it is one of the most profitable crops that a man can grow. Of all the farm crops there is none which excel it in revenue to-day. This in itself is an adequate reason for considering it.

The Apple Crop

Syracuse Post-Standard

The apple crop of New York state will not be as great as last year's, experts say, but there will be enough for a dumpling, a piece of apple pie and a dish of sauce to go with the roast pork for all of us, and for the especially favored there may be also apple schnitzel, apple butter, and perhaps layer cake with boiled cider between the layers.

Good Short Stories

Innocently the two old farmers looked at each other as they chatted in the busy marketplace, talking on "taters, turnips, and all other old farm claptrap."

And then, as if it had just occurred to him, old Pontin asked Farmer Steele if he still felt inclined to sell that shorthorn cow.

"Will you take twelve pounds for her?" he suggested offhandedly.

"No, no," murmured Steele stolidly, as he lovingly fingered his watch-chain. "Couldn't part with her for that, by long way."

"Oh, but I thought you said last market day as how you might let her go for that!" suggested Pontin.

"Maybe. But something's 'appened to 'er since then."

"She bain't dead?" said the prospective buyer, looking up quickly.

"No; but the missus, she's dead set on that coo. Wouldn't part wi' 'er for anything, and quite loves her. She'd sob 'er eyes out if I parted wi' that coo."

"Um! Suppose that ends it, then?" said the farmer, as he prepared to move along.

"Well, I don't know. Look here, Pont, make it twelve-pound-ten, and let the missus sob!"—"Answers."

The sun and moon is a reflection from the souls of all life on land and water. The sun is also a source of heat when in unshaded contact, and a source of light.

Lawless Youths Steal Fruit.

A St. Louis man has come back from Europe full of respect for German respect of law. In Nuremberg he saw a municipal grapevine growing in a little triangular patch of ground where three streets met. It was full of ripe clusters, but apparently it had not occurred to any Nuremberg boy to touch them. How long would such an exposed vineyard be immune in this country? Every little while we hear of someone who has cut down a fruit tree or given up a garden because of lawless gangs of hoodlums whose insolent depredations have become intolerable. Some of these boys no doubt are reformed and become good citizens, but a law-defying gang is a great school for crime. Medical science is doing good work in studying youthful offenders and trying to pick out for medical treatment those who are mentally defective. But boys who run with a lawless gang need not be mentally defective to acquire a contemptuous disregard for the property and rights of others and for the law and its agents. It will not do to treat the problem too materialistically, as though bad boys were only defective clocks to be sent back to the factory for repairs; law-breaking is largely psychological.—Springfield "Republican."

Queer Ways of Eating.

Spiders chew their food with hard, horny jaws.

The jellyfish absorbs its food by wrapping itself around the object which it seeks to eat.

The butterfly pumps nectar through a tube into its body, and bees and flies suck their food with their long tongues.

The woodpecker has a three barbed tongue, like a Fijian's spear, with which it draws out the worm or insect.

The cuttlefish does not chew its food with its mouth, but with its gizzard.

The horseshoe crab chews its food with its legs. The little fellow grinds its food morsels between its thighs before passing them to the mouth.

Sturgeons draw in their food by suction and are toothless.

Corn and other grain ground as fine as white flour and mixed with sugar and oils, makes good cake, needing no eggs or lard.

Good oil can be pressed from fresh coconuts and many other kinds very plentiful, and shells can be used for fuel.

Stone houses last much longer than wood, require no paint, therefore are much cheaper in the end.

THE ROMANCE OF THE ORCHARD.

Written for Green's Fruit Grower by Albert E. Vassar.

"Good morning Mister Apple," said the sweet juicy pear, "Your cheeks so round and colored Shows of health you have a share;" "Indeed I have Miss (Pear) Bartlett And you are looking fine. Suppose we do get married, At the fruit picking time?" But Miss Peach who is a rival Seemed not well pleased at that And blushed in silent sweetness While Miss Pear and Apple chat. Said Miss Peach, "I see you're lovers And each other's good do see, But the people, oh the people Are all in love with me." "She's right," spoke out Miss (Plum) Damson Most clear and smilingly, "But I'll beat 'em all in jelly, And folks devour me." Then Miss (Pear) Bartlett seemed offended While Miss Peach's cheeks turned red, And Miss Plum and Mister Apple Ran off and quickly wed. Though Miss Bartlett was indignant And with anger seemed to fill, Miss Peach spoke out most sweetly "Well the folks all love me still."

It is healthier to travel after a rain fall on land. Land and water belong to no one person, but to all.

A great many present-day forms or customs and religions over all the world are for remembrance of history and learning.

Editor of Green's Fruit Grower,

Dear Sir,—I have been a subscriber to your "Green's Fruit Grower" for about 8 years, there is not a paper of any kind I look forward to as I do yours. If people knew of it that are interested in fruit growing and farming I believe your subscription could be doubled.

I was born on a beach where one could throw a stone into the Atlantic Ocean, and until 8 years ago did not hardly know the branch from the root of a tree, but after buying trees from Rochester Nursery and subscribing to Green's Fruit Grower, will say that I have the finest looking trees in this neighbourhood.

I trust you will live for many years to come as I believe there will never be but one Chas. A. Green.

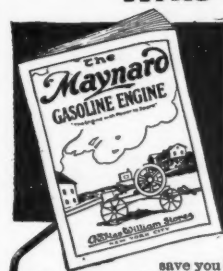
Irving F. Sylvester.

FREE! Get This Book

Try This Engine 60 Days!

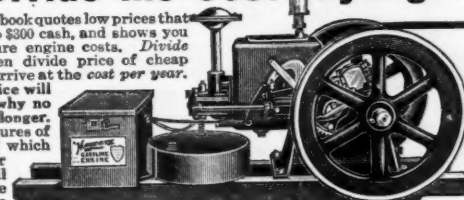
You Be The Judge! No Money in Advance

Write For This Book Today!



Before you decide on any engine, make this test on your own farm at our expense. Try any size Maynard for 60 days, without a penny in advance. There is nothing on your farm that will be of so much help to you, nothing that saves so much work, time and money as a good power outfit. It's going to make a big difference to you whether you get the right engine or the wrong one. There's a big difference in cost—and a still bigger difference in service. There is no longer any reason why you should take a chance of getting anything except the right power outfit. After this 60 days' free trial, if you think there's a better engine made at any price, or its equal at anywhere near its price, return the Maynard at our expense. You don't send us a cent. This 60 days' trial is free.

Divide the Cost by Eight!

Our Rating 1½ H. P.; Our Price, \$29⁷⁵

Actual factory tests prove this engine develops up to 1½ H. P., at normal speed. All Maynards are rated at normal speed instead of speeding them up. A speeded up engine is like a speeded up horse—all right for a while but can't stand the strain. If we speeded up our 1½ H. P. at some other speed up theirs, we could give it a much higher rating than we do. Our price, \$29⁷⁵, for this 1½ H. P. engine (our rating) is an example of the low prices we quote on larger sizes. Actual Factory Test card, sent with your Maynard, shows actual horse power developed. Write today for this greatest money-saving engine book published.

Charles William Stores
680 Stores Bldg., New York

THE GENUINE SMITH STUMP PULLERS
W. SMITH GRUBBER CO.
CATALOG FREE-DEPT. 3 LA CRESCENT, MINN.

4 CARRIAGE WHEELS FREIGHT PAID \$8.75
STEEL TIRES \$2.10
With Rubber Tires, \$16.60; Top, \$6.50; Shafts, \$2.10.
Repair Wheels, \$5.95; Axles, \$2.00; Ford Tops, \$21.95.
Wagon Umbrella Free. Buy direct. Ask for catalog M.
SPLIT RICKORY WHEEL CO. 1103 C St. Cincinnati, O.

Sales Agent \$1200 a Year
We want one exclusive representative in every county. The position is worth \$100 a month to one selected, if inexperienced we train you. Write on the nearest table of transparent handled knives and saws, for proposition. Novelty Cutlery Co. 1549 St. Louis, Mo.

As low as \$7.90 \$10,000.00
Bucks This Hertzler & Zook SAW
Portable Wood
This is the cheapest saw made. Only \$7.90 saw frame to which a ripping table can be added. Guaranteed 1 year, money refunded and all charges paid if not satisfactory. Write for catalog. Hertzler & Zook Co., Box 61, Belleville, Pa.

LET 'ER RAIN
If you've a man's work to do—wear **TOWER'S FISH BRAND REFLEX SLICKER \$3**
A.J. TOWER CO. BOSTON
TOWER'S FISH BRAND

QUICK MONEY
Growing Mushrooms.
Add \$10 to \$70 a week to your income, quick. Demand exceeds supply. Grow in cellars, sheds, boxes, etc. Now is best time. Profits bigger, quicker. Anyone can do it. Send for book of information; it's FREE.
Bureau of Mushroom Industry, Dept. 23, 1342 N. Clark St., Chicago

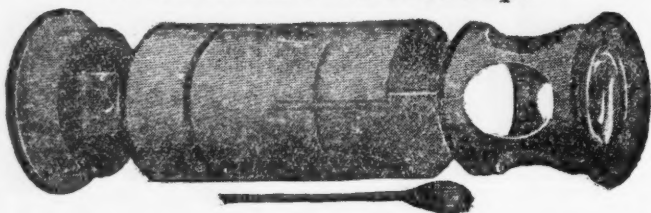
AGENTS: \$40 A WEEK
Startling new hosiery proposition—unheard of. Hosiery for men, women and children. Guaranteed for one year. Must wear 12 months or replaced free. Agents having wonderful success. H. W. Price sold 60 boxes in 12 hours. Mrs. Fields 109 pairs on one street. G. W. Noble made \$35 in one day. Sworn proof. Sold only through agents. Not for sale in stores. A hosiery proposition that beats them all. for terms and samples. **THOMAS MFG. COMPANY, 2370 Elk St., Dayton, Ohio**

\$250 for Reliable Man or Woman: Distribute 2000 free pkgs Borax Powder with Soaps, etc., in your town. No money, or experience needed. **Y. WARD CO., 217 Institute, Chicago.**

How to Tell the Insects

Get one of these microscopes and see for yourself what they look like. Then compare with the Spray number of Green's Fruit Grower. It will tell you just what to do to get rid of them.

A Scientific Microscope



This microscope is imported from France. As regards power and convenient handling, good judges pronounce it the best ever introduced for popular use. The cylindrical case is manufactured from highly polished nickel, while there are two separate lenses—one at each end of the microscope. The larger glass is a convex magnifier, adapted for examining insects the surface of the skin, the hair, fur, or any small article. The other lens is exceedingly powerful, and will clearly delineate every small object entirely invisible to the naked eye. Every fruit grower, farmer, family, school and teacher should own a microscope. Full directions as to how to use it with each microscope.

OUR OFFER:—If you will send us two subscribers at 50 cents per year, we will send you this scientific microscope, prepaid, or given with Green's Fruit Grower, one year, for 50 cents.

Selling A Patient

Written for Green's Fruit Grower by ELY VAILL LAUGHLIN, Iowa

(Dr. Braley's unusual advertisement brings about his ears a hornet's nest.)

Nelly Braley read and reread the letter and enclosed clipping in amazement. Had her uncle suddenly gone insane? Was he thinking of retiring from practice? Was—was—was—, and her mind was fairly swamped with the possibilities that had caused her relative to insert the strange advertisement.

The letter and clipping that had so stirred Nelly's speculative faculties read as follows. First the clipping:

PATIENT FOR SALE

I offer for sale a desirable medical patient. This patient will prove a perfect gold mine for its possessor if worked systematically. Returns may be expected to continue for at least twenty years. Just the thing for an energetic physician with capital. Can make immediate assignment. For particulars address Dr. J. H. Braley, Oak Grove, Ohio.

Now for the letter:

Dr. J. H. Braley,
Oak Grove, Ohio.

Dear Sir: Your advertisement in the Herald has come to my notice. I take it that the patient you speak of is wealthy, and suffering from some fancied or minor ailment; also that treatment may be prolonged an indefinite time. I make a specialty of such cases. My facilities for continuing treatment are unsurpassed.

I find in the Directory that your reputation for veracity is above reproach. I am taking the liberty, therefore, of offering you \$5000 for exclusive rights to the foregoing patient. Wire immediately your acceptance or rejection. If acceptance, follow immediately by letter giving sex, history, and financial rating.

Yours fraternally,

L. H. Trustworthy, M. D.

With true feminine curiosity Nelly scanned every line. What did her uncle mean anyway? Who was the patient, and why such a valuable asset? Why was Dr. Trustworthy willing to offer such a large sum? The more she thought about these things the more puzzled she became.

Nelly was Dr. Braley's sixteen year old niece. He had left her in charge of the office during an enforced absence in the neighboring city on business. He had instructed her to examine all his mail and to write him if anything important came. In extraordinary cases he had instructed her to telegraph immediately.

This letter, the young lady thought to herself, was certainly something extraordinary. Plainly her duty was to telegraph, \$5000 she realized was no small sum, and her uncle ought to know of the offer at once.

With Nelly to think was to act. She immediately hastened to the telegraph office and after much erasing and re-writing crowded what was necessary into the 10-word limit. Her dispatch read as follows:

Dr. Trustworthy, of New York, offers \$5000. Wire.

Nelly, having done what she conceived to be her duty, stopped to chat for a few moments with the dispatcher, a girl friend a few years her senior. The conversation very naturally turned upon the message that had just been written. The reference to \$5000 aroused the dispatcher's curiosity, and she could not refrain from inquiring about it.

"Is your uncle going to sell his practice?" she asked with just a show of inquisitiveness.

"Oh, no," Nelly replied innocently, "he's just selling a patient."

"Selling a patient!" the girl exclaimed. "Why that's odd. I never heard of a doctor doing such a thing. What do you mean by it anyway?"

"I'm sure I don't know," Nelly replied. "That's what the letter said. Uncle advertised in the Herald that he had a patient to sell, and Dr. Trustworthy, of New York, offered him \$5000. I didn't know anything about it until I got this letter to-day."

Very demurely Nelly produced the letter and enclosed clipping, and her friend scanned them with every show of interest.

Unsophisticated Nelly did not know that in doing this she was committing a serious breach of professional courtesy. Neither had she learned that little items of gossip grow and expand at an alarming rate. With an innocence born of inexperience she entered into an animated discussion with her friend as to whom the patient might be.

"Well, isn't that strange," the friend remarked after reading the letter and clipping several times. Your uncle is certainly getting an awful good price for his patient."

"That what I think, too," Nelly replied, "and I've wondered if it might not be old Mrs. Higgins. I've heard uncle say lots of times she'd probably last twenty years or more. They say she's just awful rich. Lots of folks say there's really nothing the matter with her but laziness."

"Then again it might be young Mr. Burrows. He calls on uncle almost every day. He thinks he's got consumption. I heard uncle tell mamma only last week that he's a snap."

The young telegrapher did not agree with Nelly wholly as to whom the negotiable patient might be. She knew that it was rather common talk among the townspeople that Dr. Braley did not always hasten his cures, especially if the patient was known to be wealthy. Knowing this she named a half-dozen or more who might easily be classed with Mrs. Higgins and Mr. Burrows.

Insomuch as each of the girls was rather self positive the contention as to whom the negotiable patient might be waxed rather warm and some townspeople who had entered the office had no trouble in deciding what the dispute was about. After Nelly's departure they made further inquiries of the dispatcher, and soon knew the whole story. Dr. Braley's sale of one of his patients was branded as being a particularly despicable act, and his reputation for fair dealing received an additional black mark.

People's tongues, especially in small places, wag energetically whenever a choice morsel of gossip, or a chance breath of scandal, or some shady transaction becomes known. Dr. Braley's sale they catalogued as decidedly shady. The word passed from mouth to mouth, according to the locomotive habits of such species of knowledge, gaining a little with each repetition one may be sure. Of course, at first, there were the customary demands of secrecy but soon the talk became so general that even this prerequisite was dispensed with.

The subject of any scandal, if innocent, is generally the last to be advised of what is going the rounds. Such was the case with Mr. Braley. Not a breath of the general talk reached him. Those next concerned, the victims, were favored also.

They were equally as ignorant of the imposition purported to be practiced upon them.

The fates, evidently, had maliciously planned the denouement. The day or two before Dr. Braley wrote that he would be home, the victims—and their number included all the physician's patients except those in dire distress—were told their doctor had sold them to some city fakir for an exorbitant price. Even now they were informed he was in the city arranging the details of the nefarious transaction. It was openly stated that the doctor's profits in the several deals made him immensely wealthy.

Indignation reigned supreme among the doctor's heretofore faithful adherents. Some forgetting the fact that they were largely in arrears to him voiced their complaint in loud and flagrant boasts. Others threatened to bring the matter into the courts. Even the most conservative promised to assist in discouraging villainy of this type.

The doctor had written that he would be home on the 3:30 afternoon limited.

Throughout the entire forenoon of that day Nelly was kept busy answering the phone. Every questioner desired to know the time of the doctor's return. She thought that some epidemic must surely be threatening for she had never known such a host of hurry calls. She hurried to the telegraph office and wired him not to miss the train for the whole town was sick and needing him.

With commendable fore-thought she ordered a carriage to be at the station to meet him.

There was no abatement of the urgent demands for the doctor. Nelly's bland replies finally degenerated into impatient reminders that the doctor would be home on the 3:30. It was with no little relief, therefore, that she heard the whistle of the afore-named train. Now, she thought the doctor can soon care for these people who need him so badly.

Presently as she sat looking out of the office window the sound of loud voices, accompanied by much laughter, reached her. She looked up the street from whence came the sound. To her consternation she recognized the carriage she had ordered for the doctor with the horses in full run. After him was a rabble such as the town seldom saw. Some were in vehicles, some on foot, and some on horse-back. Quickly the cavalcade passed her. The riders she saw carried banners on which she could read such inscriptions as "Judas Iscariot II," "Equal to the Black-hand," "An Unholy Jail-bird," etc.

Indignantly she saw her respected relative receive upon his person various positive evidences of displeasure. Chief among these were stale cabbages, rotten eggs, spoiled potatoes, and the like.

Inside the carriage she could see the doctor urging the driver to renewed effort. His glasses were hanging broken at his side, his hat was crushed beyond recognition, and his garments bore evidences of contact with violent and unfeeling hands. With wonder, mixed with genuine anger, Nelly saw the pursuer and pursuers disappear from sight down the street.

When darkness had settled over the little town, a mud-bespattered, disreputable looking figure stole up to the back porch of Dr. Braley's office. Nelly heard the knock and answered it. With difficulty she recognized her erstwhile sedate and stylish uncle.

"Nelly," he snorted when well within the protecting walls of his office, what is the meaning of this indignity to which I have been subjected? Why I have been chased like a dog—why pelted with every vile thing imaginable? What does it all mean I say?

For answer Nelly handed him the letter and clipping from Dr. Trustworthy. He scanned each carefully. A glance of understanding suddenly showed itself among the mud spots and cabbage welts.

"Oh, I see," he roared, "those careless printers substituted patient for patent. I was merely advertising for sale the patent I had just received for my improved chest dilator. The attorney promised me large returns but I thought he meant money returns. It'll teach me to fight shy of patent attorneys after this."

Rolling stones, while not gathering moss, attract considerable attention in that they do more or less bumping.—The Roller Monthly.

Take Plan

Plant Green's Good trees. Currant and Novem difficult to the spring.

Fall is al berry, Red tal Shrubs,

Green's T best in the United Sta and live. wonderful fr

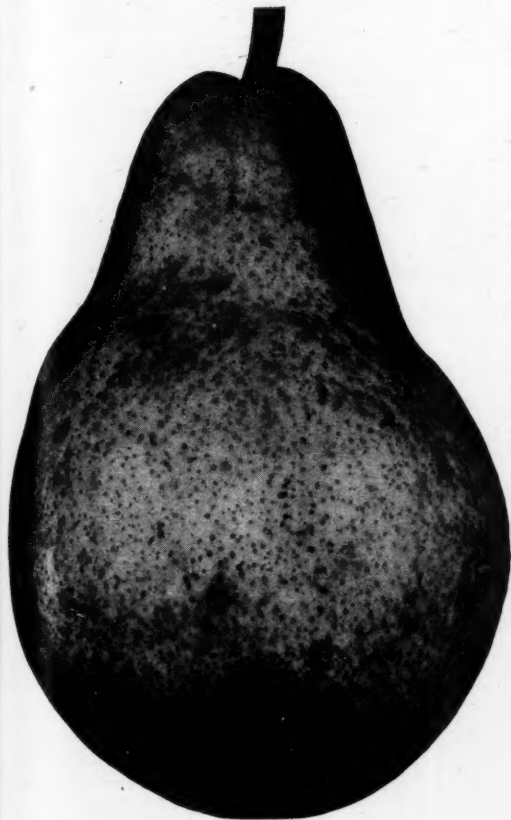
Your cop cat

GRE

Take The Advice of a Successful Fruit Grower! Plant These Two Big Money Makers NOW



C. A. GREEN
Pres.

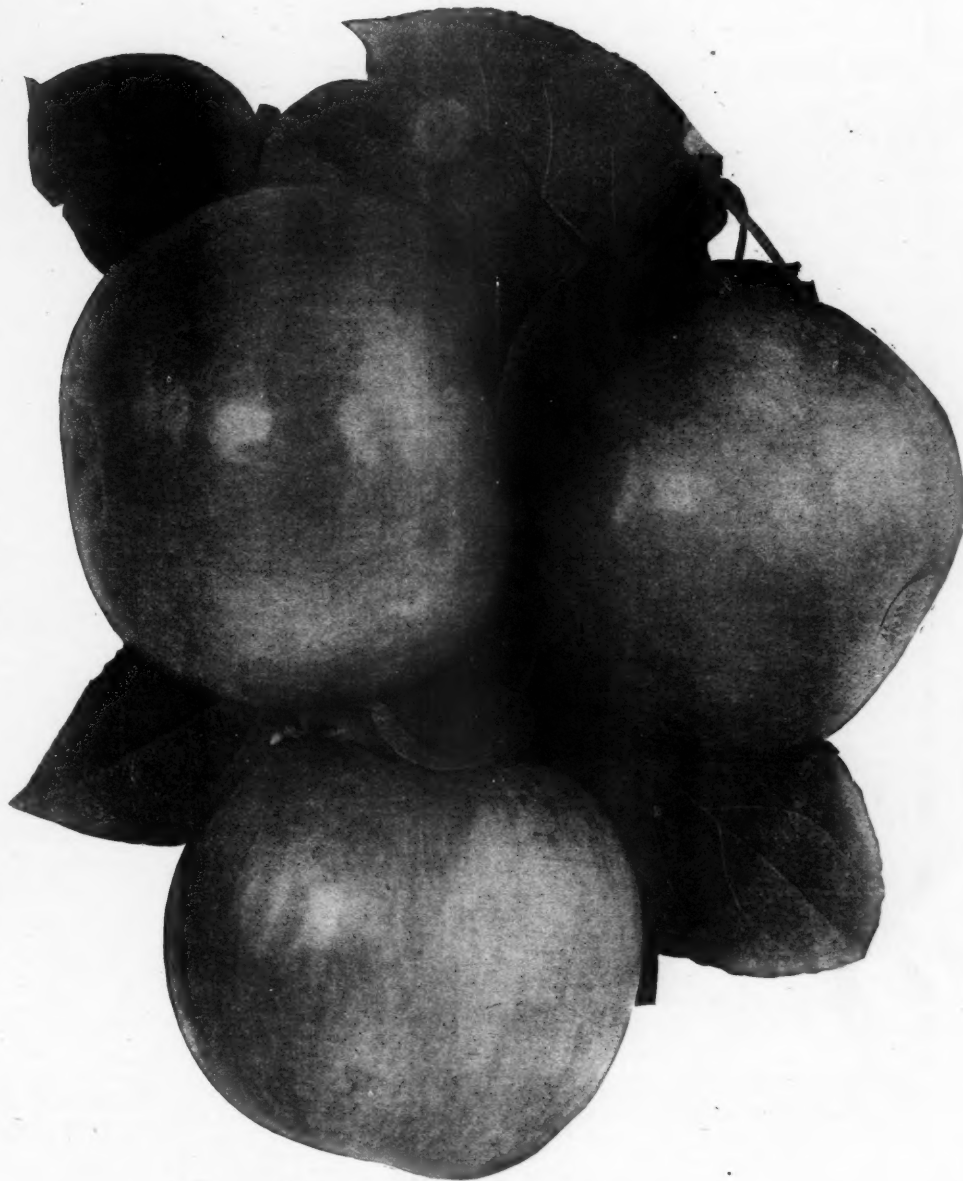


BARTLETT PEAR
Selling for \$5 a barrel this fall

¶ C. A. Green says: "Bartlett is unexcelled among pears as a money maker. Buyers are searching through the country now for Bartlett Pears, of which there seems to be a scarcity. ¶ McIntosh Red is one of the best apples in the world and one of the most handsome, a sure cropper. McIntosh Apples sell at a fancy price. The trees are remarkably hardy and succeed almost everywhere. Plant McIntosh Red Apple now and gain almost a year's growth."

¶ Get your trees planted this fall. Common pears sell for \$3.60 per barrel and Bartlett Pears bring you \$5.00 per barrel this fall.

¶ The average wholesale price of McIntosh Apples in New York City (the price the farmer got) for nine years, 1904 to 1913, was \$3.51 per barrel. This is the average quoted price on the market. In some markets much higher prices are easily obtained. You will have ready buyers for McIntosh Apples and you will keep a few barrels for your family because they are so good to eat.



McINTOSH APPLES

For 9 years sold for highest average price on the N. Y. Market

Currants and Gooseberries

¶ Plant Green's Diploma and Red Cross Currants and Green's Gooseberries between the rows of your fruit trees. CURRANTS and GOOSEBERRIES will bring you good profits while your orchard is growing. October and November are the best months for setting out Currant and Gooseberry plants. It is sometimes difficult to get them to the planter early enough in the spring.

¶ Fall is also a good time for setting out the Blackberry, Red and Black Raspberry, and hardy Ornamental Shrubs, Vines and Trees.

¶ Green's Trees are grown RIGHT, where trees grow best in the greatest natural fruit tree section of the United States. Green's Trees are straight, smooth and live. Green's Trees grow quickly and produce wonderful fruit.

PLANT YOUR TREES NOW!

Your copy of our new Fall illustrated catalog will be sent only on request

GREEN'S NURSERY CO., 91 Wall St., Rochester, N. Y.

B-U-Y-N-O-W!

See What You've Saved by Waiting
Special to Readers of "Green's Fruit Grower"

Water or Storage Tanks

Made of 20 gauge galvanized steel
won't rust; strongly riveted seams.
Lot No. P-101.
Cap. 51-2 Bbls.
\$4.25
Lot No. P-104.
Cap. 5 Bbls.
\$5.95
Larger sizes
at proportion-
ate prices.

Bargain Closet Outfit
Complete \$9.98
Elegant low tank
closet outfit of guaran-
teed grade material.
Spendable value.
Golden oak seat.
Lot No. P-902.
Other like savings in
Free Plumbing Book.

Best Thresher Hose
17c Foot
Lot No. P-116.
Heavy rubber hose,
smooth bore,
extra heavy wall,
prevents collapse-
ing. In sold in 50 ft.
lengths, multiples 5 ft. to 500 ft. Com-
plete stock of valves and fittings. Special
price per foot 5-4 in. diam., 17c; 6 in. dia-
m., 21c. Larger sizes proportionately
low in our Bargain Supply Book.

Heating Plants
Priced Low
You can easily install
your own heating plant
with the assistance of our
free expert engineering
service. Warm as low
as \$67, steam \$134 and
hot water \$184.
Send for our Free Heating Book today.

Iron Pipe and Fittings

3c
per ft.
Good iron pipe in random lengths
complete with couplings. Suitable for
gas, oil, water and conveyance of all
liquids. Size 3-6 to 12 in. Our price on
1 in. per foot, 3c; 1-4 in., 3 1/2 cts. ft.
Complete stock of valves and fittings.
Send us specifications and requirements.
Larger sizes priced just as low.

Thresher Belts 5c
Per Foot
Of heavy rubber, thoroughly stretched;
specialty at 5c per
foot, on 4-8 ft. with
1-2 in. Order by Lot
No. P-103. Superior
quality endless belting,
very strong—30
ft. length, 4-8 ft. 3 in.
wide, \$13.50. Lot No.
P-105.

Quick Tank Heater
\$4.39
Self-heating cast iron
tank heater. Needs no
fire to heat. It draws
heat from the boiler or
may be used in galva-
nized, cement, wood or any
kind of tank. Complete
with grate, ash tray and
24-inch smoke stack with
damper. Any fuel.
Height 12 in. Width 24
in. Lot No. P-55.

Why We Can Give Such Wonderful Values

We can undersell others because of our original and "different" buying methods. It's all in our wonderfully successful PRICE-WRECKING PLAN. This plan belongs solely to us. There is no other like it. We are more than a Mail Order House—bigger, better, more powerful than a hundred big "Department Stores" rolled into one. Our 40-acre plant is a Mammoth Clearing House of Bargains picked from the cream of the country's choicest merchandise offered at forced sales.

We buy nothing but bargains in clean, desirable, up-to-date goods. Receivers' and Sheriffs' Sales, Auction Events, Expositions, Manufacturers' Outlet Sales, Overstocked Merchants, etc., seek us when big stocks must be sacrificed quickly for ready money. Thus our tremendous \$10,000,000.00 Buying Power gives our customers an overwhelming price advantage.

The specimen values shown on this page are not exceptional—they are an every-day part of our PRICE-WRECKING Selling System, made possible by our Buying Plan. So remember this: You can always save money—make big, unusual savings—by dealing direct with us. And you can't take any risk, as our \$10,000,000.00 Satisfaction Guarantee stands back of every article in our Book of 50,000 Bargains.

CHICAGO HOUSE WRECKING CO.
(Harris Bros. Co., Owners)

Sturdy Hog Troughs 99c

Biggest bargain ever offered on strong, durable Troughs for hogs and cattle. Heavy galvanized cross bars and legs, securely riveted. Scaled bottom; easily cleaned. 5 ft. long by 16 gauge. Each, 99c. Order by Lot No. P-45. Heaviest galvanized iron, standard size, 6 ft. long. Each, \$1.25. Lot No. P-44.

Bath Tub Complete, \$13.00

Best white enameled, cast iron one-piece, heavy roll rim bath tub with 6 ft. long, latest style nickel-plated trimmings, including full double bath cocks for hot and cold water, nickel-plated connected waste and overflow and nickel-plated supply pipes. Order Lot No. P-101.

Combination Wood Saw \$10.95

Special Low Bargain Price
Keep the boys on the farm! Do away with the drudgery of wood sawing with one of these up-to-date outfits. Frame of heavy hardwood, extra well braced and bolted; arranged for long poles or regular cordwood. Saw guard adjusts for saws 20 to 30 inches in diameter. Mandrel 4 ft. 1 in. long, 1 1/2 inches in diameter and turned down to fit 1 1/2 hole in saw. Balance wheel weighs 95 lbs. Weight complete with extension table 300 pounds. Big bargain at \$10.95 (with table, but no saw). This unusual snap is but a specimen of the many like values secured in a recent big deal. Many other time, labor, and money saving devices at savings that will positively surprise you. Order "yours" today or write for complete Bargain Price List. Send for it today! Order by Lot No. P-490. Price \$10.95.

T-R-E-M-E-N-D-O-U-S Building Bargains

Get Our Latest Direct-To-You Lumber Price List

We are the undisputed leaders in Lumber. In quality, quantity and low, direct-to-you prices, no other concern can compare with us.

No matter where you are, or what you are going to build, we positively guarantee you a tremendous saving on material.

\$239 Buys a Whole Car New Lumber!

Yes, Sir! We mean exactly that: \$239 buys a whole car of brand new, good quality lumber here; all spick and span, select, clean stock, correctly graded and manufactured in our own plant. All in stock for immediate shipment from a carload to 1,000,000 feet. Every stick guaranteed—the same kind of lumber that we have been shipping right along to satisfied customers everywhere.

4 Big Shipping Points Centrally Located
To reduce freight expense we will ship from Washington, Texas, Mississippi or Chicago. Select the point nearest to you.
as \$12.00 per thousand feet. Send us your lumber bills and get our freight prepaid prices before you buy.

40 Acres of Bargains

Material in This Home \$759

Thousands of Home Lovers have first sent for our \$10,000.00 Free Plan Book and then found great profit and satisfaction in building their homes the "Harris Way." The beautiful, modern Harris Home No. 6-A shown here is one of 100 Harris Home Designs. It was built the "Harris Way" from materials, sensibly cut to fit, costing only \$759.00.

Shingle Bargains
Lot No. P-923, 10 in. Clear 5-2, 10 in. Washington red cedar shingles, per 1,000 \$2.47. Lot No. P-924, Extra Star "A" Star 5-3 16 in. Washington red cedar shingles, per 1,000 \$2.99. Lot No. P-925, Extra clear 5-2 16 in. Washington red cedar shingles, per 1,000 \$3.27. Absolutely clear. Per 1,000, \$3.27.

Build Your Home Now "The Harris Way"

GALVANIZED ROOFING

97c Buys Metal \$2.25 Buys ROOFING 2 GALV.

We can furnish Corrugated, V-Crimped, Standing Seam, Beaded Ceiling, all kinds of ornamental ceiling plates at lowest prices ever made. Painted sheets from 97c per square up, and Galvanized from \$2.25 per square up.
Tell us your roofing needs! Get our advice. It is free, but invaluable to you! Write us the kind of building, exact dimensions of roof, when you expect to buy, etc., and we will give you the benefit of our 23 years' experience. Our Roofing Experts will tell you exactly how much to buy, best selection, exact cost, full directions for laying, etc.

READY ROOFING 40c

We recognize no competition on roofing! Our 40-acre plant contains stocks of dependable roofing of every kind at prices absolutely slaughtered. Our famous AJAX Brand Rubber Surface New Ready Roofing, put up two and three pieces to the roll, complete with nails and cement; 1/2 ply 40c; 1 ply 75c; 2 ply 86c; 3 ply 96c.
Red or Gray Slate—2 and three pieces to roll, 96c; better quality, \$1.16. Red or Gray Slate Coated Shingles, \$2.50 per square. We have other grades at proportionately low prices.

SAMPLES OF EVERY KIND OF ROOFING—FREE! Send for our Big Roofing Catalog showing everything in Roofing, and accompanied by prices lowest ever made by a house!

SPECIAL SALE OF

RUMELY MERCHANDISE

Our recent gigantic purchase of the Rumely stock of Gasoline Engines, Cream Separators, Electric Light Plants, Ensilage Cutters, Feed Mills, Corn Huskers, Corn Shellers and Hay Balers enables us to offer these high-grade, brand new articles direct-to-you at less than dealers used to pay in carload lots. Never in our 23 years of PRICE-WRECKING have we offered such wonderful bargains! Duplicate parts can always be obtained.

Unbeatable Low Fencing Prices!!

Strong Fencing, Per Rod 15c
Here again our extensive operations and big deals enable us to quote heretofore unheard of low prices on Strong Fencing. Strong Fencing, securely secured at our own price. A splendid fencing for hogs and all general farm purposes. 26-inch, 7 line wires high. Square mesh, stays 12 inches apart. Put up in rolls of 30, 30 and 40 rods. Order by lot No. P-33. Same as above, except stays space 6 inches, per rod 21c. Order lot No. P-32. Staples for erection, 100 lbs., \$1.95. Order by lot No. P-34. Our wire catalog tells more.

Galvanized Fence Wire \$1.13 Per 100 Lbs.

Smooth galvanized wire. A handy and positive necessity about the farm. Suitable for fences, stay wires, grape vines and all purposes for which wire is generally used. Put up in rolls of irregular lengths ranging from 50 to 250 feet. This low price is for 100 pounds of our No. 9 gauge, the standard size mostly in demand. We have every desired size in this lot at proportionately low prices. Order by lot No. P-37. Galvanized Staples 2c per lb.

Barbed Wire Less Than 2c Per Rod

New Galvanized Heavy weight barbed wire, put up on reels of about 100 lbs. 2 point barbs. Strong and well made for long service. Price per 100 lbs., \$1.95. Order by lot No. P-35.
Galvanized Barbed Wire, light weight, first grade and best made, put up exactly 80 rods to the reel. 2 point barbs. Price per reel, \$1.55. Order by lot No. P-36. Best quality Barbed Wire per 100 lbs., \$2.25. Order lot No. P-12.

Rumely Cream Separator \$29.50

Think of it! Only \$29.50 for a "RUMELY" 500-lb. The patented distributing blades make best disc Separator made. Ca-500 lbs., skims a gallon per minute. Good for twenty years—quiet, smooth-running; no delicate mechanism; simple, strong, interchangeable parts; always easily obtained. Skims clean, better fat. Guaranteed perfect—brand new—satisfactory. Order Lot No. 36P1101—\$29.50. Get our offers on larger sizes at lowest Rumely Special Bargain Sale Prices.

Rumely--Olds Gasoline Engines

Positively the greatest engine values ever offered. Here's your chance to own a famous RUMELY-OLDS Gasoline Engine for a mere fraction of its real worth. For 30 years the "OLDS" has ranked with the best made. It has no superior for power, simplicity, reliability, ease of operation, durability and fuel economy. Repairs cost little or nothing. Parts easily obtainable.
NEVER BEFORE SUCH AN OFFER BY US
We believe in truthful advertising. We have built our name on the honesty of the piece to buy that makes you know it! So when we say to our Farm Friends: "Here and now is the greatest farm engine bargain we ever offered, or you ever heard of," every Farmer is bound to take notice of our words.
A BIG SAVING ON THE RIGHT ENGINE
Now's the time—here's the piece to buy that makes you know it! No matter what your needs, we can save you a vast of money. All sizes—1-2 to 65 H. P., stationary, portable, direct connected with pumps, hoisting and sawing outfits, etc. Genuine Rumely-Olds Engines, remembered! Brand new, guaranteed perfect, for quick shipment direct to you. Get our amazingly low prices, full descriptions, etc., NOW!

Rumely Ensilage Cutters

Biggest cutter bargain yet! Powerful machine—enormous capacity—10 to 20 tons per hour. Cuts any kind of silage fast as you can feed it. Throws and blows perfectly! Automatic safety stop; shear bar gives four cutting edges; variable lengths; blades easily removed, ground and replaced. parts easily obtainable. Order by Lot No. 36P1235, \$110; other sizes at bargain prices.

Rumely Electric Light Outfits \$265

A genuine "Rumely Special" Electric Light Plant complete in every detail for \$265.00. Simple, safe, economical; anybody can run it. 75 8-candlepower and 35 16-candlepower lights, rated at 30 volts, with 50 amperes. Famous Rumely-Falk Engine with all equipment and built-in magneto; shunt wound generator; switchboard containing rheostat, volt meter, ammeter, ampere hour meter and all necessary switches; Standard Willard batteries. Get our "Rumely Sale" prices on 150-300-500 light outfits. Tremendous savings and satisfaction guaranteed. Order by 36P37.

Cut Out This Coupon

Chicago House Wrecking Co., Dept. P-3 Chicago
Send me free of cost the catalogs checked.
☐ Catalog of 50,000 Bargains
☐ Plan Book of Houses & Barns
☐ Roofing, Siding and Ceiling
☐ Rumely Merchandise
☐ Wire and Fencing
☐ Plumbing and Heating
Name.....
Address.....

Rumely Feed Mills

This 8-inch Rumely Mill—weight 325 lbs.—is the greatest value ever offered at \$11.00. Simply can't be beat for sturdiness, ease of operation and economy. Few parts. Special burrs a feature for grinding cob corn and small grains, coarse, medium or fine. Six-inch mill for shelled corn at \$5.50; 10 and 12-inch sizes, proportionately low prices. Send for Bargain offers. Order by Lot No. 36P1235, 8-in., \$11.00.

Chicago House Wrecking Co.

35th and Iron Sts., Chicago

This Big BOOK FREE

Our Mammoth PRICE WRECKER Catalog contains 50,000 Bargain Offers; everything for farm, home and personal use at tremendous savings. Contains complete description of Lumber and Building Material. Full explanation of our tremendous Rumely Furniture, including description of the merchandise and a full history of our method of securing these bargain stocks. (A 2nd edition now ready FREE! Send for your copy, and respond to Now! opposite corner)



Roch